348

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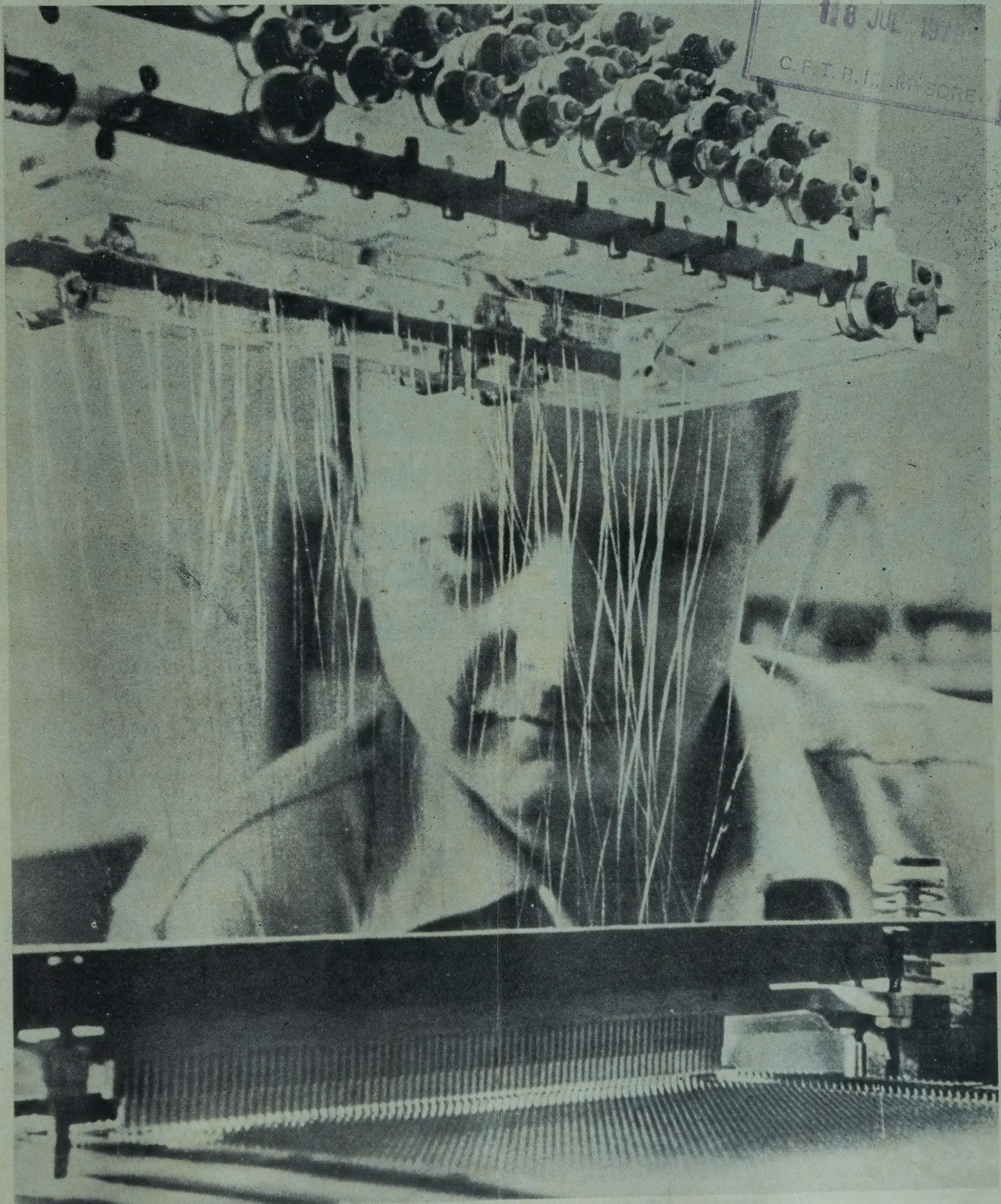

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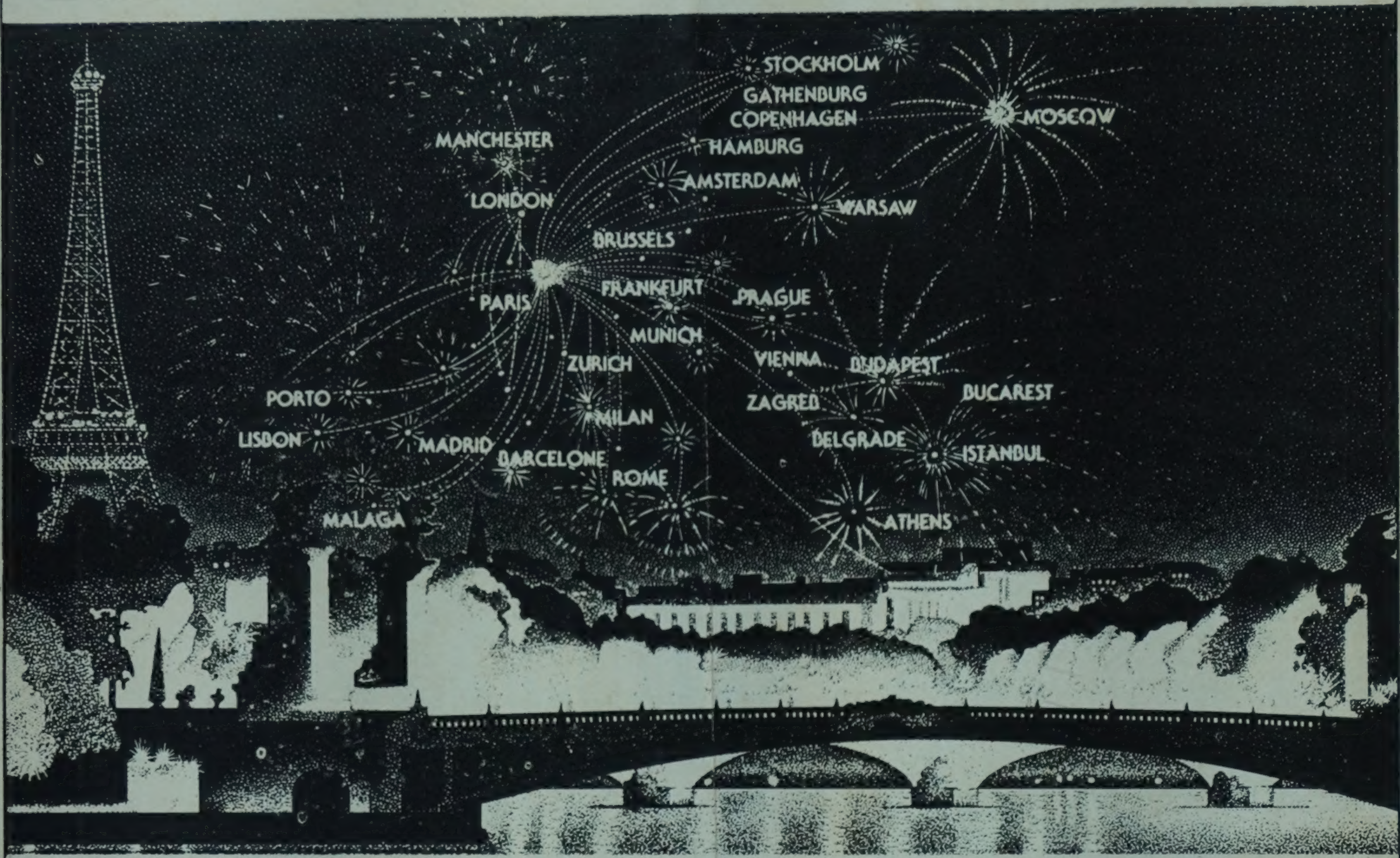
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A palliative, but no cure

The sharp rise in paper prices in the recent past has prompted the central government to clamp statutory control over the prices and distribution of the white printing and cream-laid or cream-wove categories of paper which are most commonly used. The ex-factory price of the white printing variety has been fixed at Rs 3,000 a tonne—Rs 250 more than the hitherto informally arranged price of Rs 2,750 for supplies to the educational sector. The fair ex-factory price of cream-laid or cream-wove paper has been set at Rs 3,785 a tonne.

As regards distribution, the government has empowered itself for issuing directions to manufacturers to dispose of their stocks of these two types of paper and also to effect their sales in future on such terms and conditions as may be specified. For the time being, it has been decided that the outlets of Hindustan Paper Corporation (HPC) will be utilised to ensure equitable distribution of white printing paper. The existing distribution channels in the private sector may also be utilised partially to ensure widespread distribution to small consumers. However, the performance of the trade will be closely watched to see if malpractices still remained. Ultimately, the HPC is envisaged to be entrusted with the task of distribution of both white printing and cream-laid or cream-wove varieties.

Some imports of writing and printing paper are also proposed to augment supplies from the domestic sources. Bulk consumers as well as publishers and printers will be required to register their requirements with the HPC. The details of the procedure for allocating indigenously produced cream-wove or cream-laid paper and imported paper are to be announced shortly.

The above decision, though not wholly unjustified in the context of the widespread public resentment over the deteriorated situation in regard to paper supplies, however, can act as no more than a palliative. The problems of the industry are much more deep-rooted: they require to be tackled differently.

The increase of Rs 250 per tonne in the ex-factory price of white printing paper should enable the industry to cut down its loss on producing this variety. On 30 per cent of its total output, which the industry is required to turn out in the form of white printing, it is said to be incurring an annual loss of Rs 20 crores at the rate of approximately Rs 1,000 per tonne. This loss should now get reduced to Rs 15 crores a year. But still this huge loss will have to be made up from profits from the non-controlled varieties. Some overall profit has also to be made to yield return to shareholders.

The basic problem of the industry, undoubtedly, is the slower addition to its capacity compared to the growth in demand. Although production last year increased by about 76,000 tonnes over the previous year to touch the level of about 10 lakh tonnes, it still fell short of the estimated demand by nearly 50,000 tonnes. Notwithstanding the fact that additional capacity to as large an extent as 37.7 lakh tonnes has been sanctioned for installation (of this, 7.5 lakh tonnes is covered by industrial licences, 27.9 lakh tonnes by letters of intent and 2.3 lakh tonnes by registrations with the DGTD), shortages of paper may not be alleviated to any significant extent. As the president of Indian Paper Mills Association, Mr M. L. Somani, has observed recently, not many of the schemes already sanctioned may materialise in the next few years. On the other hand, demand is expected to grow at the rate of seven per cent per annum. On current indications, there might be a gap of approximately one lakh tonnes between demand and supply in 1982-83.

Mr Somani has pointed out and quite appropriately that the main reason for the manufacturing capacity not getting augmented sufficiently is the lack of adequate incentives and inadequacy of return on capital. He has stressed that whereas the prices of iron and steel and alloys, cement, and fuel, power and lubricants have gone up in the last few years by 58 per cent, 30 per cent, 49 per cent and 30 per cent, respectively, the prices of paper have increased by a modest 11 per cent. As the capital outlay involved in producing a tonne of paper is as high as Rs 13,000, fresh investment in the industry cannot be expected unless its profitability is ensured. Currently, there are also constraints of coal supplies by rail—alternatively, coal has to be moved by road at a much higher cost—, the deterioration in the quality of coal and frequent interruptions in power supply, which in the case of some areas of industry's operations is inadequate even otherwise. Labour trouble too is disrupting production.

IDB loan

Mr Somani has recommended that the suggestion of the central government's working group, which has been set up recently, that the Industrial Development Bank of India should grant soft-term loans to the paper industry for implementing schemes of renovation and modernisation ought to be enforced with a sense of urgency. He has also emphasised that instead of using foreign exchange for the import of paper, it would be beneficial to import good second-hand paper plants to expand the manufacturing capacity in a short time at a comparatively low cost. With a view to relieving power shortage, second-hand captive power plants, he has urged, should also be imported, presumably on the same considerations as those governing the import of second-hand paper-making plants.

Mr Somani has further suggested that the requirement that the industry should produce 30 per cent of its total output in the form of white printing paper should be diluted to 20 per cent. This, he thinks, will suffice to meet the needs of the weaker sections of society. One, however, fails to understand how the industry can ensure adequate supplies of white printing paper through nearly one-third reduced production.

The government, of course, will do well to reintroduce the excise duty concession for higher production which was withdrawn with effect from April 1. Excise duty concession has proved a powerful stimulus for raising output in the short run. From the long-term point of view, however, means will have to be devised for a rapid expansion of the industy's capacity. The imposition of control may have a further dampening effect in this regard even though some increase has been allowed in the ex-factory price of white printing paper.

The government has been giving greater importance to the growth of the small-scale sector and not inappropriately because capital costs involved being lower, the smaller units can be put up more expeditiously. Yet the growth trend in demand does warrant a more sympathetic consideration of the cases of large-units, including those belonging to the large business houses. Past experience has shown that while the large-scale units have been able to utilise 80 per cent of their capacity, the small-scale sector has worked to not more than 65 per cent capacity.

Foodgrains output at new peak

THE OPTIMISM expressed by the minister for Agriculture and Irrigation, Mr S.S. Barnala, a few weeks ago, that the production of foodgrains during the 1978-79 agricultural year might exceed 130 million tonnes has materialised fully. The data released last week on the eve of the year coming to a close (on June 30) suggest that the year witnessed a new peak in output at 130.5 million tonnes. This compares with the yields of 125.6 million tonnes in 1977-78—the previous record—and 111.17 million tonnes in 1976-77.

The outputs of all categories of grains have registered an upward trend. The production of wheat has gone up to 34.7 million tonnes from 31.33 million tonnes and 29.01 million tonnes in the previous two years and that of rice to 53.79 million tonnes from 52.67 million tonnes and 41.92 million tonnes. The output of coarse grains is estimated to have improved from 28.88 million tonnes in 1976-77 and 29.80 million tonnes in 1977-78 to slightly over 30 million tonnes. Significantly enough, the production of pulses too has gone up by about two lakh tonnes over the 1977-78 level of 11.8 million tonnes to touch 12.01 million tonnes.

While the outputs of both wheat and rice have set new records, suggesting that the green revolution continues to gather momentum, those of coarse grains and pulses, however, have still been lower than the 1975-76 levels of 30.49 million tonnes and 13.04 million tonnes, respectively.

contributing factors

Several factors have contributed to increased production. The more important among them are the significant expansion in irrigation facilities, increased consumption of fertilisers, better management practices and good seeds. The additional irrigation potential created in 1978-79 is estimated at 2.8 million hectares, as against 2.6 million hectares in the previous year. The consumption of fertilisers is said to have gone up by about 0.9 million tonnes to approximately five million tonnes. Good weather condition too helped considerably.

The output of potatoes is said to have increased significantly—to nine million tonnes from 8.15 million tonnes in 1977-78 and 7.17 million tonnes in 1976-77. This crop, also was a record one.

Along with the increase in production, the procurement of both wheat and rice during 1978-79 set new records. Wheat procurement had exceeded 7.6 million tonnes by June 27. As the market arrivals still continue to be around 50,000 tonnes a day, it might touch eight million tonnes —1.5 million tonnes more than the original expectation. The procurement of wheat aggregated to 5.5 million tonnes in 1977-78. The procurement of rice had been of the order of 6.06 million tonnes up to June 23, compared to slightly more than 4.68 million tonnes in 1977-78.

The total procurement of foodgrains in the 1978-79 agricultural year around 13.6 million tonnes, thus, has also been a new record, the previous peak having been hoisted in 1977-78 at 10.3 million tonnes. In 1976-77, the procurement had been of the order of 9.8 million tonnes. The new record in procurement has been set despite free movement of grains throughout the country.

The government has now ample stocks of both wheat and rice. The wheat stock, which had been getting depleted in the past three years as a result of increased offtake from fair-price shops, allowing of limited exports on loan basis to some neighbouring countries, the repaying of part of the Soviet wheat loan (which was received a few years ago) in kind and also use of some stock for the food-for-work programme, has been buttressed by the recent procurement. On April 1, it amounted to 5.1 million tonnes. The rice stock then was put at 8.8 million tonnes. Allowing for the releases during the last three months, the overall stock of foodgrains with the government can be said to be as large as nearly 20 million tonnes.

The trade also has good stocks. A clear evidence of this is available from the easy supplies in the open market as well as from the fact that the millers in UP, Punjab and Haryana had towards the close of last week nearly 4.94 million tonnes stock of rice, as against 4.3 million tonnes 12 months earlier.

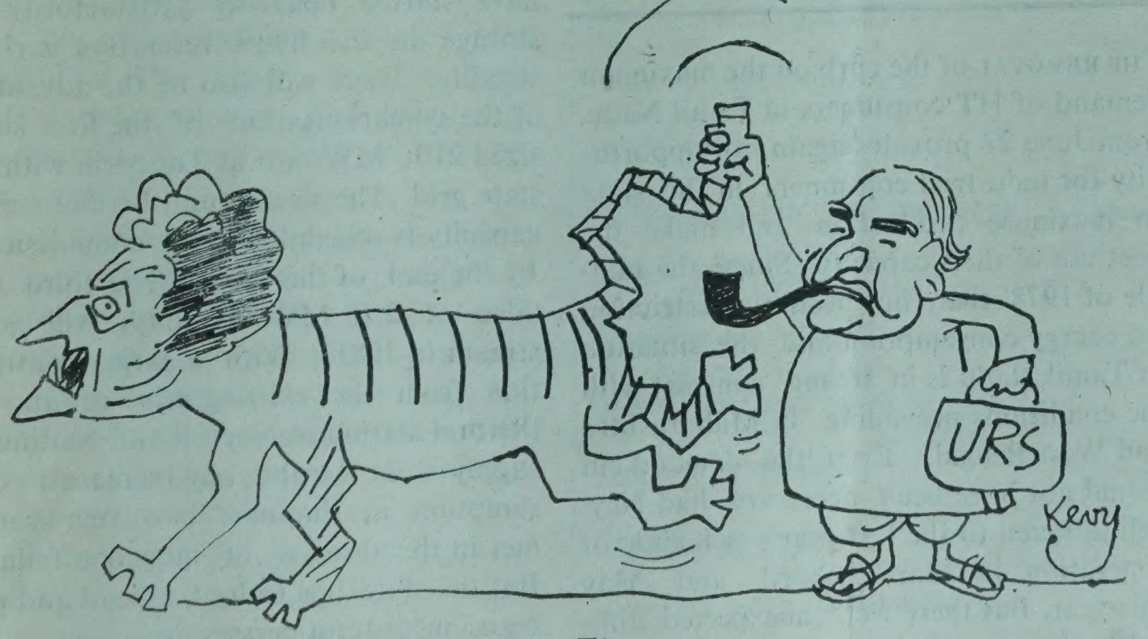
Although delayed rains have their implications for the coming kharif crop, the crop outlook this year is not considered bleak. As a result of the reduction effected in the prices of fertilisers due to the scaling down of the excise levy on them in this year's budget, their application is expected to go up substantially during the kharif crop. The impact of the recent hike in oil prices on those of fertilisers will be felt primarily during the rabi season. The area under irrigation too is expected to be raised this year by as much as three million hectares. In fact, Mr Barnala is reported to have expressed the view that the overall output of foodgrains this year may show even further improvement. He has indicated the possibilities of effecting some exports.

Even if Mr Barnala's expectation is belied to some extent, the food situation in the country should remain comfortable throughout this year. A small dip in the stocks with the government, if necessary, need not cause any concern. It should have a salutary effect on the money supply, which has recently expanded by about Rs 580 crores as a result of unprecedented procurement.

In the light of the above, no slowing down of the Food-for-Work Programme is warranted. Recently, disconcerting reports about pruning this programme have appeared. Mr Barnala, however, has stressed that the original commitment of making available 1.5 million tonnes of foodgrains for this useful scheme remains. Should the fears about the kharif crop prove exaggerated, the Food-for-Work programme may even be enlarged. There is a sound case for this.

The vast increase in the procurement of foodgrains in 1978-79 obviously requires strengthening of the storage capacity in the country, especially at the consumer end so that the movement of foodgrains is facilitated. It is encouraging to note that a fairly ambitious programme of building up additional storage facilities is already being implemented.

Attention also needs to be bestowed on strengthening the procurement machinery in such states as Bihar and West Bengal so that the farmers there can feel confident that if they produce more they will not be exploited by the unscrupulous among the traders. There is large scope for improvement in the crop yields in these states. If their full potential can be exploited, more rational use of the land resources in the surplus producing states would be possible.



Paper Tigress

Steel plans

THE BOKARO and Bhilai steelworks may be expanded during the next few years to 5.5 and five million tonnes ingots capacities, respectively, primarily through the updating of their technologies. Currently, the capacities of both are being augmented to yield four million tonnes of ingot steel per annum. The expansion of the Bhilai plant to four million tonnes stage is likely to be completed in 1981 and that of Bokaro a year or so later.

The technical consultants from the Soviet Union and Bhilai are expected to meet shortly to consider the basic technical and economic considerations for raising Bhilai's capacity to five million tonnes. They will prepare the programme for the design work for this modernisation scheme. The technical innovations and improvements proposed to be introduced on the pattern developed in the Soviet Union in recent years include the conversion of the outmoded open hearth furnaces into twin-hearth furnaces, going in for coal dust injection, and modernisation of some of the conversion facilities.

The technical innovations proposed at Bokaro have already been approved by the Indian side. A coordinated programme for the design work to 5.5 million tonnes stage has also been worked out by the Indian and Soviet experts. A proposal for this scheme is understood to be under the consideration of the government.

an ambitious plan

Along with the above two steelworks, a fairly ambitious plan has also been drawn up for the modernisation of the Rourkela and Durgapur projects. This will yield some additional capacity. Part of the Rourkela modernisation schem is already under implementation. It includes the modernisation of the hot strip mill by the end of this year to increase the supply of better quality hot rolled coils. A cold rolled silicon electrical steel sheet plant is also being set up here. It is expected to go on stream by 1981 and will result in a good deal of saving in foreign exchange as the requirements of this type of steel, which is used for the manufacture of transformer core, are being entirely met at present through imports. The other areas of improvement now contemplated at Rourkela include better preparation of raw materials including coal, modernisation of the existing blast furnaces and installation of an additional furnace.

Consultants have been commissioned recently for the modernisation of the Durgapur steelworks which at present has a capacity to yield 1.6 million tonnes of ingot steel. This capacity is to be increased marginally through improving preparation of raw materials, nodernisation of the blast furnace complex, installation of 50 to 60 tonnes bottom blown oxygen converter and putting up of continuous casting facilities. A universal beam mill is also to be put up to produce items required in heavy construction jobs.

The rehabilitation of the Indian Iron and Steel Company's plant, which was taken over by the government in 1972. is stated to have already been completed up to nearly 90 per cent. Some major new schemes are now being considered for improving the performance of this unit further. These include the rehabilitation of mines and installation of a sintering plant.

Efforts are being made to reduce the use of coking coal at the integrated steelworks in view of the limited reserves of this type of coal in the country. Another technology improvement being attempted at Rourkela is the introduction of desulphurisation process. If it is successful, it will be adopted at all the other integrated projects. Attempts are also envisaged to develop sponge iron production.

The overall steel-making capacity at the integrated projects, which currently aggregates to approximately 11.5 million tonnes of ingot, should get augmented by three million tonnes with the expansion of Bokaro and Bhilai each to four million tonnes stage and further by slightly over three million tonnes when the modernisation programmes currently under implementation or proposed to be taken up are completed. The setting up of 3.2 million tonnes saleable steel capacity (approximately 3.7 million tonnes ingots) Visakhapatnam plant, it may be recalled, has been cleared recently. The first phase of this project—1.2 million tonnes capacity—is expected to be completed by the end of 1983. The second phase of two million tonnes capacity is likely to go on stream two years later. By about the middle of the 1980s, our steel making capacity, including the arc furnaces, thus, may go up to around 22 million tonnes.

Power prospects in the south

THE REMOVAL of the curb on the maximum demand of HT consumers in Tamil Nadu from June 27 provides again an opportunity for industrial consumers in this state to maximise production and make the best use of their capacity. Since the middle of 1978, there has been no restriction on energy consumption and the situation in Tamil Nadu is in strong contrast with the conditions prevailing in Maharashtra and West Bengal. Even the demand cut would not have been necessary had Neyveli adhered to the last year's schedule of generation in March, April and May this year. But there were unexpected difficulties in commissioning new machinery now being installed under the modernisation programme and with frequent breakdowns of the old mining machinery, there was a serious shortfall in the output of lignite.

The deficiencies in this regard are being overcome and it has been confidently asserted by the chairman of the Neyveli Lignite Corporation that raisings of lignite in 1979-80 are scheduled to rise by one million tonnes to over the last year's level of 4.3 million tonnes. The export of power from Neyveli to the state grid has already shown signs of improvement and the total availability from this source in the next twelve months will be in excess of the performance of 1977-78.

preventive maintenance

While Neyveli has slipped to some extent in recent months and a new chapter is being inaugurated, the Ennore thermal station has been giving a good account of itself in 1978-79. Even though the generating equipment and boilers have been giving some trouble, greater attention to preventive maintenance and a recognition of the technical limitations relating to the use of generators at rated capacity have been helpful in ensuring steady generation of 5-7 million units daily by both the Ennore and Basin Bridge stations. As hydel reserves also were satisfactory during most part of the year, the Tamil Nadu Electricity Board could meet the needs of all consumers except for restrictions on maximum demand for a short period.

The outlook for the current financial year also is encouraging as the monsoons have started behaving satisfactorily and storage in the hydel reservoirs is rising steadily. There will also be the advantage of the synchronisation of the first large-sized 210 MW unit at Tuticorin with the state grid. The second unit here of similar capacity is scheduled to be commissioned by the end of this year. The third unit (also of 210 MW capacity) will go on stream in 1981. With a larger contribution from the existing mine-cut and the thermal station in Neyveli and continuous supply from Kerala, any increase in consumption in the next two years can be met in the absence of monsoon failures. But the state has to look ahead and plan on a longer term perspective.

Fortunately, Tamil Nadu has a breathing

time in which new plans can be formulated on the lines suggested by the state minister for Electricity, Mr S. Ramachandran, in his address recently during golden jubilee celebrations of the Andhra Chamber of Commerce in Madras. The breather is provided by the Tuticorin thermal station. Also, the second thermal station at Neyveli may begin functioning in 1983-84. The work on the second minecut was inaugurated by the president Mr N. Sanjiva Reddy on July 4. Considerable preliminary work has already been completed and modern mining machinery will be used to tackle hard Cuddalore sandstone.

pleasant prospect

No major hurdles, therefore, may be encountered in the preparation of the second mine-cut. This open cast mine, which has an overburden ratio of 4.3:1 to lignite, will have a capacity to yield 4.3 million tonnes of lignite annually. The first unit of 210 MW will be ready by 1983 and the remaining two sets of similar capacity at suitable intervals thereafter. Ultimately, it is proposed to double the capacity of this thermal station to 1260 MW, taking the total of the two stations to 1860 MW. At 70 per cent load factor, the optimum generation can be over 25 million units daily, a pleasant prospect indeed.

The aggregate investment in the Neyveli complex, taking into account the modernisation programme of the existing minecut and the first phase of the second mine-cut, will be exeeding Rs 700 crores. The eventual outlay may well be Rs 1,000 crores and the expenditure will be fully worthwhile. The lignite reserves have greater strategic value in a coal deficit area when the cost of non-coking coal will be rising abruptly.

The Kalpakkam nuclear power station too is getting its first generator ready and power from here can be fed into the grid when the reactor becomes operative. There, of course, may be many snags before regular functioning can be attempted. But there is now the prospect of Kalpakkam getting into its stride.

These happy developments should be reassuring to power consumers in Tamil Nadu. As Andhra Pradesh and Kerala will also be giving succour, there may not be any need for curbs on power consumption for some years with good behaviour of the monsoons, as stated earlier. However, from the long-term angle, the hydel potential of Kerala and Karnataka will have to be harnessed on a defined basis. Tamil Nadu's Electricity minister has estimated that 10,000 million units are going waste annually in the absence of harnessing of the west flowing rivers in Kerala. The suggestion has been made that there should be joint power projects on the basis of assured supplies of power from Kerala to Tamil Nadu against part investment by the latter in these projects. Acceptable solutions may not be easy as no decision has yet been taken in regard to the use of the tail race waters of Pandiar-Ponumpuzha project. However, in the context of the crisis in the international oil situation, there is need to take a liberal and helpful view of inter-state projects by the participants and beneficiaries. With some favourable trends in Karnataka and Andhra Pradesh also, the grip on the power situation in the southern region should be maintained and the momentum sustained with bold planning and balanced growth in generating capacity.

Housing in eastern India

The Housing and Urban Development Corporation (HUDCO) has urged the state governments of the eastern region to set up housing boards so that they can avail themselves of the financial and technical assistance from it for implementing their construction programmes. Assam, Bihar, Orissa and West Bengal have already constituted housing boards but Manipur, Meghalaya, Nagaland, Tripura, Mizoram and Arunachal Pradesh are yet to take the initiative in this matter. HUDCO recently helped the Sikkim government to draft the necessary legislation for the formation of a housing board.

Housing shortage has been persisting in

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IN THE NATION 3-9
A Palliative, But No Cure
Foodgrains Output at New Peak
Steel Plans
Power Prospects in the South
Housing in Eastern India
With Basu in Saddle

WINDOW ON THE WORLD 10-14
OPEC Strikes Again
Elections in Ghana
Uncertainty in Uganda
Employment in Sweden
Pakistan's Economic Outlook

MOVING FINGER 15

COVER FEATURE
Towards an Information Society 16

POINT OF VIEW
Resources Mobilisation in Uttar Pradesh—*P.K. Bhargava* 22
Capital Mobility and Monetary Unification in EEC—*V.K. Bhalla* 25

BOOKS BRIEFLY
Complexities of Rural Economy —*Academicus* 35
Books Received 41

TRADE WINDS 42

READERS' ROUNDTABLE
Iron Ore for Indonesia 44

COMPANY MEETINGS
Hindustan Lever Ltd. 45
Shaw Wallace Group 48

COMPANY AFFAIRS 50

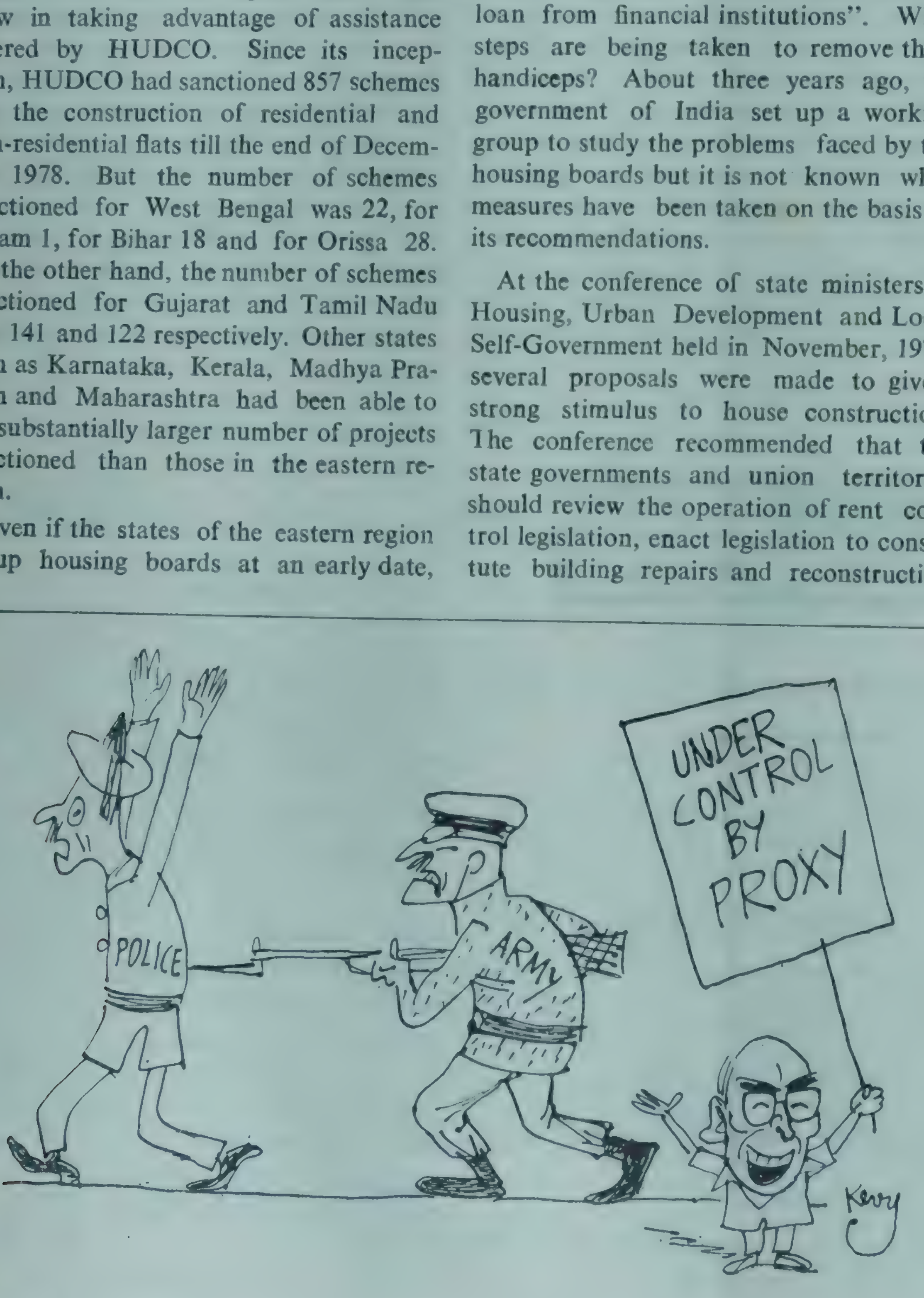
RECORDS & STATISTICS
Finances of Large Public Limited Companies : 1977-78 56

all parts of the country. The shortage as in March 1979 has been estimated at 19.7 million units—14.8 million units in rural areas and 4.9 million units in urban areas. The scarcity has been particularly acute in the eastern region. In West Bengal, for instance, the construction of new houses and the repair of the existing ones have been sadly neglected and, as a result, the congestion in Calcutta has become more severe in recent years. The floods of last year caused immense damage to houses in the districts. But the progress made in reconstruction has been far from satisfactory.

It is significant to note that all the states in the eastern region have been slow in taking advantage of assistance offered by HUDCO. Since its inception, HUDCO had sanctioned 857 schemes for the construction of residential and non-residential flats till the end of December 1978. But the number of schemes sanctioned for West Bengal was 22, for Assam 1, for Bihar 18 and for Orissa 28. On the other hand, the number of schemes sanctioned for Gujarat and Tamil Nadu was 141 and 122 respectively. Other states such as Karnataka, Kerala, Madhya Pradesh and Maharashtra had been able to get substantially larger number of projects sanctioned than those in the eastern region.

Even if the states of the eastern region set up housing boards at an early date, it seems doubtful if they will be able to play an energetic role. It has been pointed out that the West Bengal Housing Board does not have the necessary machinery for acquiring land nor has it drawn up a long-term programme for building houses. A recent report issued by the central ministry of Works and Housing has said that the housing boards are "among the most effective agencies for providing houses at reasonable cost". The report however has disclosed that the boards suffer from various deficiencies such as "inadequate funds for socio-economic surveys, non-existence of a technical organisation for advance planning, delay in getting land, and inadequacy of loan from financial institutions". What steps are being taken to remove these handiceps? About three years ago, the government of India set up a working group to study the problems faced by the housing boards but it is not known what measures have been taken on the basis of its recommendations.

At the conference of state ministers of Housing, Urban Development and Local Self-Government held in November, 1978, several proposals were made to give a strong stimulus to house construction. The conference recommended that the state governments and union territories should review the operation of rent control legislation, enact legislation to constitute building repairs and reconstruction boards, promote the formation of cooperative societies among the weaker sections of society, exempt houses constructed at a cost below Rs 12,000 from stamp duty and registration charges and, for a period of five years, from property taxes, and encourage the use of local materials and innovative practices as suggested by the National Buildings Organisation with particular emphasis on reducing the use of cement, steel and other scarce materials. The states of the eastern region should expeditiously carry out these proposals so that it will also help to create vast opportunities for employment.



With Basu in saddle

On completing two years in office on June 22, the chief minister of West Bengal, Mr Jyoti Basu, narrated the achievements of his ministry to the Calcutta Press Club, and pointed out that it had done more for the uplift of the poor than any other government, He revealed that the per capita income of the people in the state had increased during the last two years but he did not give figures to substantiate it. He said that the investment by the private sector had not been encouraging and that the public sector also had lagged behind. He attributed this situation to recession in the economy and the shortage of power. In these circumstances, could the people have derived as much benefit, as was claimed by the chief minister ?

Mr Basu also said that "the state's sluggish administration was not allowing the government to function effectively." This remark is indeed surprising since the present government has been not only just but generous in raising the pay and perquisites of its employees. The leaders of the United Front have been saying that under the Indian constitution, the state government has only limited powers and functions. But if the state government is unable to handle efficiently even these, how will it cope with its responsibilities if it gets all the autonomy it asks for ?

The state government has been rightly

giving greater attention to the improvement of agriculture and the development of rural areas. The Finance minister, Dr Ashok Mitra, disclosed some time ago that, as a result of the implementation of the various projects, over a million rural workers had been provided with jobs for a minimum period of four months each during the year. He said that this was "a most significant achievement, indeed, and contrasts with the bleakness which pervaded West Bengal's countryside in the preceding years." He also referred to the steady increase in the level of farm wages. Nevertheless, there is need for the government to tackle agricultural problems with more earnestness.

Farmers in many districts seem to feel that the impact of the drought could have been greatly minimised if they had been given timely advice and assistance by the Agriculture department as to how they should deal with it. If they had been enlightened about the drought tolerant varieties of crops and provided with seeds which could resist diseases, and if tube wells and river lift pumps had also been properly maintained, much of the damage could have been avoided. The government therefore should see to it that the funds earmarked for agriculture and allied activities are well spent.

Mr Basu said that "we leftists are a powerful force and have control over the working class". At the same time, he regretted that some trade unions were sabotaging the power plants and indulging in other anti-labour activities. He said that these unions gave calls for strike "for no reason" but the majority of power workers had not joined them. This, however, cannot be a cause for satisfaction. If a minority of workers can virtually paralyse the working of the power sector, surely, does it not call for strong and deterrent action ?

Inaugurating on the same day (June 22) the West Bengal Consultancy Organisation, sponsored by the Industrial Development Bank of India, Mr Basu said that the state was suffering because the head offices of most financial institutions were outside West Bengal. This statement has also been made several times by the local chambers of commerce. But, surprisingly, neither the state government nor the chambers have identified the financial institutions whose headquarters they want to be shifted to Calcutta. Nor have they explained in what respects more powers are to be delegated by these financial institutions to their branches. This issue is being discussed mainly from the emotional angle. West Bengal should clearly spell out its ideas so that the central Finance minister can give some serious thought to this question.

The Left Front's performance in the last two years could certainly have been more substantial if it had given greater attention to the improvement of the machinery of administration at all levels and created a climate congenial for promoting investment. However, the government deserves credit for firmly curbing parochial tendencies. Mr Basu has strongly condemned the Amra Bengali movement and described it as "an enemy of India and a slur on Bengalis". Mr Basu's approach deserves to be emulated by other state governments, many of which continue to encourage parochial trends, directly and indirectly, which, if unchecked, are bound to impair the country's integrity and independence.

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OPEC strikes again

Within six months the Organisation of Petroleum Exporting Countries (OPEC) has struck thrice.

On January 1, it had raised the price of Arabian light crude oil by five per cent from the December rate of $ 12.7 a barrel. It was then decided that it would be increased further in quarterly phases to $ 14.5 by October 1.

Soon, however, a further nine per cent jack-up was effected to push the price to $ 14.55 a barrel with effect from April 1 itself. Shortly thereafter, the member-countries were allowed to impose surcharges also taking into consideration the market conditions which had been disrupted by the Iranian turmoil.

At their meeting towards the close of last month, the OPEC members stepped up the basic price of Arabian light crude oil by as much as 35 per cent to $ 18 per barrel. Although the price has been fixed two dollar lower than feared on the eve of the OPEC meeting, the member-countries have been authorised to add surcharges up to two dollars a barrel. It has, however, been decided that the maximum price for all types of crude oil, including the allowances for quality, should not exceed $ 23.5 a barrel.

Indications are that except for Saudi Arabia and the United Arab Emirates, all the other members of the OPEC will impose surcharges. Already the price of Iranian crude oil has been raised to a little over $ 22 a barrel and that of Qatar crude oil to $ 21.5.

The possibility of crude oil prices touching the ceiling is not ruled out if the past experience is any indication. This will mean near-doubling of the prices within a short span of seven or eight months. Further, even though the new basic price effective from July 1 is supposed to remain in operation till the end of the year—the position is to be renewed when the OPEC members meet in Venezuela in December—another upward revision in it may be effected even earlier if the hawks amongst the oil producers have their way. They can press for a review, say by September.

Although, percentage-wise, the hike in the prices of crude oil effected since December last has been of a smaller order than the step-up in 1973-74, yet in absolute terms it has been much more pronounced. In 1971 the price of Arabian light crude ranged around $ 1.68 a barrel. It rose to $ 1.82 in 1972 and was jacked up by $ 7 in January, 1974.

There is another qualitative difference between the current situation and the situation in 1973-74. It pertains to the availability of supplies in the global market. The OPEC members have pegged their outputs according to their own calculations to force cuts in consumption in the developed countries, which, they feel, have not lived up to their assurances about avoidance of wasteful uses of energy. The Iranian situation has also led to tightness in global supplies with the result that spot market rates command considerable premium over the official prices.

The stiff dose that has been administered by the members of the OPEC to the consumers of oil, though not wholly unjustified from their point of view, as oil is not a renewable source of energy, however, is bound to have world-wide repercussions. The fears expressed by the last week's Tokyo summit of the seven major industrialised nations — the Federal Republic of Germany, France, Italy, Japan, the United Kingdom, the United States and Canada—that the steeply stepped-up oil prices and oil shortages have reduced the room for manoeuvre in economic policy in all countries dependant on imports of crude oil or petroleum products are not unwarranted. They can make inflation worse and curtail growth in both the industrialised and the developing countries. The worst sufferers will be the non-oil developing countries whose balance of payments position is already precarious.

Take the case of India. Although it meets slightly over 40 per cent of its requirements of crude oil and petroleum products from its own sources, the recent price increases effected by the OPEC are expected to entail a heavy burden on it. The oil import bill of India, which was expected to go up this year by Rs 300 crores—from nearly Rs 1,750 crores last year—in terms of the last December's decision of the OPEC to raise the price of Arabian light crude to $14.5 by October 1, is now anticipated to increase by as much as Rs 1200 crores. Exact calculation in respect of this burden have yet to be made. Even conceding that the additional burden might be slightly less, nearly 50 per cent of India's annual export earnings will have to be utilised for financing imports of crude oil and petroleum products alone.

Indian scene

India, of course, is somewhat better placed than most developing countries. Thanks to the technical and other personnel from here who have found gainful employment in the west Asian countries in recent years, the inward remittances by Indians abroad have shown encouraging trends. But can India always depend on this ? Certainly not. These remittances are understood to have stopped growing in any large measure. So the adverse impact of imports of crude oil and petroleum products on the balance of payments position should be felt soon, notwithstanding the fact that several measures have already been taken to contain the demand for petroleum products. These include raising of prices of such products as petrol, kerosene and high-speed diesel oil, shift from naphtha for the manufacture of fertilizers, slowing down of the dieselisation programme of railways, etc.

The increased burden of oil import bill is bound to be soon reflected in further increases in the prices of petroleum products in India, as has happened in many other countries. Exercises in this regard are being conducted. The price increases already effected through the raising of the excise levies in this year's central budget were aimed at containing the budgetary deficit. The refineries have yet to be compensated for the increased cost of their throughputs. They are all in the red currently. The exercises which are underway are aimed at how the refineries should be compensated.

The new increases to be effected in the prices of various petroleum products will not only depend on the overall additional burden of the oil import bill but also on their relative importance to the national economy. It also remains to be seen how far the central government will like to forego some of its excise revenue to moderate the increases in the prices of petroleum products in the interest of containing inflationary trends.

There is no doubt that the consumption of oil in the world has to be curbed and vigorous efforts have to be made to develop alternative sources of energy as fast as possible. The decisions of the Tokyo summit need to be hailed in this connection. In terms of these decisions, the European Economic Community is to restrict its current year's oil consumption to 500 million tonnes (10 million barrels a day) to maintain oil imports between 1980 and 1985 at an annual level not higher than in 1978. Canada, Japan and the United States will each achieve the adjusted import levels to which they are pledged in the IEA (the International Energy Agency) for 1979 and will maintain imports in 1980 at levels not higher than the 1979 levels.

ceiling on imports

The seven countries assembled at the Tokyo summit have also expressed their will to take as goals for a ceiling on oil imports in 1985, the following figures :

—For France, West Germany, Italy and the United Kingdom : the 1978 figure.

—Canada whose oil production will be declining dramatically over the period between now and 1985, will reduce its annual average rate of growth of oil consumption to one per cent, with the consequent reduction of oil imports by 50,000 barrels per day by 1985. Canada's target for imports will, therefore, be 600,000 barrels per day.

—Japan has adopted the 1985 target at a level not to exceed the range between 6.3 and 6.9 million barrels a day. It will review this target periodically and make it more precise in the light of current developments and growth projections, and do its utmost to reduce oil imports through conservation, rationalisation of use and intensive development of alternative energy sources in order to move toward lower figures.

—The United States has agreed that its 1985 imports should not exceed the level either of 1977 or the adjusted target for 1979, i.e, 8.5 million barrels per day.

These 1985 goals will serve as reference to monitor both energy conservation and the development of alternative energy sources.

The other developed countries are to be prevailed upon to adopt similar goals. Endeavours at developing alternative sources of energy, particularly coal and nuclear power, are to be accelerated.

Elections in Ghana

INSPITE OF the widespread doubts about the possibility of elections in Ghana soon after the coup which toppled the military regime of General Fred Akuffo only a month ago, the Ghanaians went to polls, as scheduled, on June 19 and hope to see a civilian government in their country by October 1.

Flight-Lieutenant Gerry Rawlings, chairman of the Armed Forces Revolutionary Council which took power recently, stood by his promise that the military would not interfere with the elections. In a broadcast, he also confirmed that the handing over of power to a new civilian government would take place not later than October 1. The army needs time to complete their "house cleaning" operation aimed at rooting out corruption which is considered to be rampant among the military and the civilian life. As part of this operation, Lt Gen Ignatius Acheampong, the former head of state, was executed recently.

Six main parties fielded nearly all the 900 candidates competing for 140 parliamentary seats. Each of the main parties had also put up a candidate for presidentship with four persons standing as independents. Of the six main parties, three were serious contenders for the presidency: The Popular Front Party led by

Mr Victor Owusu, the People's National Party of Mr Hillar Limann and the United National Convention of Mr "Willie" Offori-Atta.

The People's National Party (PNP), which is the successor to Dr Kwame Nkrumah's Convention People's Party, has a commanding position in the new Ghanaian parliament with 71 of the 140 seats. The PNP's nearest rival, the Popular Front Party (PFP), which inherited the mantle of former prime minister, Dr Kofi Busia, has got 43 seats.

American pattern

The PNP has also taken a convincing lead in the voting for the presidency with nearly 514,000 of the total votes cast in its favour, as compared with 432,000 votes for the PFP. Under Ghana's new constitution, there is to be an executive president on American lines. The constitution says that to win on the first round a candidate has to take at least 50 per cent of the total votes cast. The outcome of the voting on the second leg of the presidential election depends on how voters who backed one of the minor candidates in the first round switch their vote. On the second round, the PNP's Dr Hilla Limann may win. Apart from the fact that most people will be expected to back the winning party in the parliamentary elections in the hope of getting benefits in the future, Dr Limann has apparently been offered the support of some of minor parties. The United National Convention Party (UNC) of Mr William Offari Atta, which did much worse than expected, gaining only 13 parliamentary seats, is also expected to back Dr Limann.

Dr Limann was virtually unknown in Ghanaian politics until he was chosen to lead the party earlier this year. A career diplomat, he was chosen after the party leader, Mr Imoru Egala, was banned from taking part in the elections. Mr Limann's comparative obscurity as a career diplomat might have been a help while the present anti-corruption measures were being pursued by the new military government.

The general direction of the PNP is leftist, with a determined call for a more extensive welfare state to cover free education, better health care and social services. But the PFP, which has fought the image of being the rich man's party, prefers a healthy mixed economy with incentives for private investment. At the same time it believes investment should be led by state intervention.

The period between the elections and actual transfer of power to civilian administration is likely to be used by Flt. Lt. Jerry Rawlings to bring about homogeneity in the defence forces. Many senior officers, it is reported, have been maltreated by their soldiers during the coup which toppled the former military government of Gen. Akuffo. He however, wants to move a little cautiously because the recent execution of the former head of state, Gen Ignatius Acheampong, along with a member of his military government, deeply shocked Ghanaians.

AFRC had not formed any specific programme to deal with the very poor economic situation. It preferred to concentrate on rooting out corruption, leaving the process of reconstruction to the civilian government which is to follow in a few months. However, normal life is becoming difficult every day. For instance Ghana faces extreme shortage of food in urban centres. The military administration has already made approaches to foreign governments for food aid. Since the Armed Forces Revolntionary Council took control of the country, it has been forcing traders and shopkeepers to sell food and other articles at the officially controlled price. Previously most items had changed hands at well above the official price, reflecting both scarcity and exorbitant profits in the distributive trade. But the AFRC's move has been described as "economic suicide" by an economist because it has increased consumption when supplies were already tight. As a result, the local markets are stated to be running out of food stocks. Ghana finds it hard to buy food abroad as its foreign exchange reserves are low. Gross foreign exchange reserves are less than one month's import bill. Under these circumstances western nations may came forward with some practical help.

Uncertainty in Uganda

WHILE MR Yusufu Lule, the displaced president of Uganda, is reported to have moved to London, demonstrations continue around the Ugandan capital, Kampala, in his support. Recently about 600 demonstrators stopped cars carrying eight ministers from Kampala to the state house, Entebbe, more than 20 miles away, to see the new president, Mr Godfrey Binaisa. The Tanzanian and Ugandan troops escorting the ministers fired over the heads of the demonstrators

Eastern Economist 30 Years Ago

JULY 8, 1949

There is, perhaps, in India still insufficient realisation of the fact that the ideal of freedom of information and free flow of news may themselves be a source of danger when there is an imperfect code of honour or lack of uniformly high standards of journalistic integrity. Just as the danger to the untrammelled disclosure of the truth may arise from governmental regulation or the slant which newspaper proprietors may seek to import to the news which they purvey, the abuse of freedom may arise often from the journalist himself when in the craze for sensationalism, he ceases to distinguish between those spheres in which the public has a legitimate right to know the truth and those private or personal matters in which they have no such interest. The British Royal Commission has criticised the tendency in certain sections of the Press to intrude into "private affairs in their quest for 'journalistic honour. The UN sub-commission has also emphasised the need for an international code of journalistic honour. This problem of the "yellow press" as it has come to be called is one in which India is immediately and vitally interested, and it is not without significance that the Indian representative on the sub-commission who took a leading part in its deliberations should have been one who has fought tenaciously for the highest standards of conduct and decency in Indian journalism.

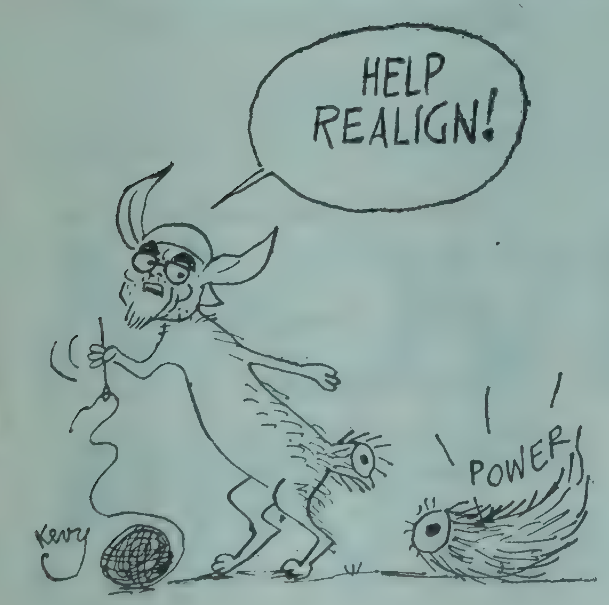
to disperse them. Some more demonstrators had stoned cars, set fire to tyres and put up road blocks around the Ugandan capital. There were also attempts to organise a general strike in the city. Garages refused to sell petrol, Some shops failed to open and crowds tried to stop food lorries entering the city. Mr Yoweri Mseveni, the Defence minister, was attacked by demonstrators outside Kampala but was unhurt. A police station was also attacked.

The National Consultative Council (NCC), which passes for Uganda's parliament, has elected Mr Godfrey Binaisa, the Attorney-General, as the president. Mr Lule had earlier declared that the NCC's action was "unconstitutional and illegal" and had stated that he could be removed only through elections or a referendum.

Behind the clash between Mr Lule and the NCC lies a tangle of personality and ideological conflicts within Uganda's transitional government, formed two months ago following the overthrow of Idi Amin. A central element of the conflict is the future of exiled former president Milton Obote, who wishes to return home shortly. He is disliked by the country's largest tribe, the Baganda.

The 67-year-old Mr Lule took office only two months ago as the head of a Uganda Liberation Front coalition government, formed in exile to rule when president Idi Amin was driven from power. He reshuffled his cabinet twice in two months. Various members were angry at the demotion of three of their left-wing colleagues known to be allied to Dr Milton Obote. This and the continuing bickering among the country's political leaders forced Mr Lule to go.

Complicating the issues are the rival tribal, regional and ideological differences within the council and inside the cabinet. The differences have been at the root of much of the political conflict in Uganda since it gained independence from Britain 17 years ago. Mr Binaisa, the new acting president, who is 60, was Attorney-General under Dr Obote but resigned after a row with him over the then proposed (1967) constitution. He went into private practice but left the country after Amin came to power.



Employment in Sweden

DURING THE recession of the recent years, Sweden has made its biggest-ever commitment to maintaining employment. This has been done amidst broad political consensus and has made it possible to keep the level of open unemployment low by international standards. At the same time, these measures have created a kind of parallel labour market next to the regular one. One of the major tasks of government's economic policy in the eighties will be to solve this problem so that this group of outsiders can be shifted onto the regular labour market.

Since the recession began making itself felt on the Swedish labour market at the end of 1976—lagging somewhat behind the rest of western Europe—more than 100,000 jobs have vanished from the country's industrial sector—in other words, roughly every tenth job in industry. Despite this, open unemployment has not averaged more than about 2 to 2½ per cent. In international terms, this is a low figure. But it does not tell the whole truth. The most important reasons why it has been possible to keep open unemployment so low and why total employment has not declined, despite the bad time, are that public sector jobs, in such areas as health care and education, have continued to grow in number.

Second, amidst political unity, labour market policy measures have been undertaken on such a large scale that, relatively speaking, they appear to have few, if any, parallels in the western world. But they cost a lot of money, contributing materially to the huge Skr 45,000 million deficit in the national government's total budget of Skr 172,000 million (1 Swedish Krona—£0.11 approx).

A major aim of the government's labour market policy has been to keep down the number of people losing their jobs, mainly in industry. With the Security of Employment Act as a base, the government has attempted to combat unemployment from within companies themselves—in other words, before unemployment has had a chance to materialise. (The Security of Employment Act means, among other things, that an employer must show acceptable cause before firing a person). This philosophy began to develop under the Social Democratic administration in the early 1970s. Since 1976, the non-socialist cabinets have taken it over and carried it further.

recruitment grants

Companies which hire people for new jobs earlier than originally planned have also been able to receive funds for this in the form of so-called new recruitment grants. As for the training programmes included in this part of government's labour market policy, these efforts have mainly fallen within the "25-kronor system". Companies hit by economic crises which provide training for their employees instead of resorting to firings and lay-offs have received grants of Skr 25 per hour per participating employee, for a maximum of 960 hours per person.

But the above measures alone have not sufficed to keep open unemployment down. Among other things, it has been necessary to create more publicly funded relief jobs than ever before. During the winter of 1978-79, more than 60,000 people—nearly 1.5 per cent of the Swedish labour force—could be found in relief jobs of various kinds. Not so long ago, relief jobs in Sweden were largely synonymous with road construction work. This is not true today. Nowadays, there are relief jobs within nearly all sectors—in industry, public agencies, institutions, service occupations, municipalities and country councils, etc. The national government subsidy which is paid to employers who establish relief jobs covers 75 per cent of total wage or salary expenses. This subsidy is payable for a maximum of six months for a given person. Characteristic of today's relief jobs is also that about half of them are held by young people (aged 16-24).

During the first quarter of 1979, 55,000 to 60,000 people took part in labour market training courses of various kinds. In other words, at the beginning of this year, about 120,000 people were either in relief jobs or labour market training. They, thus, outnumbered those (94,000 in February) who were openly unemployed. If we also count the number who have government-subsidized special office positions as well as sheltered or semi-sheltered jobs, nearly 170,000 people were involved during February in various types of labour market policy programmes. Given this background, the comparatively low percentage of openly unemployed people only partially describes a situation which has prevailed for a long time. The real dimension of these problems is indicated by the fact that a quarter of a million people or 5-6 per cent of Sweden's labour force have been excluded from the regular labour market. The main task of labour market policy now is to try to shift this large group of people into permanent jobs as the economic situation of the country improves.

Pakistan's economic outlook

Addressing his post-budget press conference in Islamabad recently, the Finance minister of Pakistan, Mr Ghulam Ishaque Khan, stated that the impact of taxation proposed in the new budget would be much less harsh than the inflationary pressure that would have resulted otherwise. He added that the new budget was designed to give the country a real sense of direction and correct the distortions of the past. Unlike the previous government, the present administration had taken the people into confidence about the current economic situation and sought their cooperation to steer the country out of the woods.

The Finance minister declared that Pakistan was engaged in peaceful nuclear research programme, particularly to meet its increasing power requirements. By the beginning of the sixth plan, the gap in Pakistan's power requirements would be of the order of 350 MW. To bridge this gap, it was necessary to harness atomic resources. Regarding funds for the proposed Chasma nuclear power project, he said these would be available after some of the big projects, including the Karachi Steel Mills and Port Qasim, had been completed. The allocation made to Pakistan Atomic Energy Commission in the new budget, he stressed, were normal requirements. It was carrying out research in agriculture, medicine, minerals and other fields. He emphasised that Pakistan's atomic research programme was meant entirely for harnessing of power resources.

watch on prices

Mr Khan said that his government proposed to keep strict watch on prices which might tend to increase following the new fiscal measures. However, the prices of many commodities transported by railways may not rise as freight rates had not been raised. He added that deficit financing to make up the remaining resources gap of 3,000 million rupees might lead to 15 per cent increase in currency expansion, as against about 22 per cent in the previous year.

Pakistan's economy last year has demonstrated a further consolidation of recovery trends in the growth of real output, particularly in the commodity producing sectors of agriculture and industry. This has been stated in the economic survey, which points out that though the recovery has not been across the board (it being manifest only in selected areas of economic activity), yet there has been a distinct upward movement signifying a forward march of the economy. The gross domestic product has recorded a growth rate of 5.9 per cent, about twice that of population, for the second year in succession. The growth rate of GNP has been even higher, average for 1977-78 and 1978-79 being 8.2 per cent. This has permitted a breakthrough against stagnation during 1970-77 when the annual average growth was 3.7 per cent in GDP and 4.2 per cent in GNP, allowing only a marginal improvement in per capita income.

Per capita income at constant factor has increased to 646 rupees during 1978-79 from 625 rupees in the previous year—a rise of 3.4 per cent. This is in line with the general trends of GNP commodity producing sectors as a whole which have recorded a growth of 4.4 per cent, agriculture sector 4.2 per cent and industrial sector 4.5 per cent. The private industrial investment is estimated to have increased from 2,273.5 million rupees in 1977-78 to 2,304.7 million rupees during 1978-79.

The law about Zakat and Ushr has been finalised and is expected to be approved by the cabinet shortly. About abolition of interest, the Finance minister stated that it was a complex issue and complete elimination of interest would take at least three years. The government, however, was seized of the matter, he added. The government had no intention of devaluing the currency and nationalising gold and rumours to this effect were unfounded.

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I rather believe that Mr Morarji Desai acted somewhat thoughtlessly when he treated the Brezhnev offer to train an Indian and accommodate him in a Soviet space flight next year. Without much difficulty I could think of quite a few eminent Indians whom the country could afford to send in a space flight. My ready choice, however, would fall on JP. Despatching him up into space, in my view, has many attractions. The greatest of them, of course, would be that this could send Mr Chandra Shekhar plummeting to earth. I have read some history, ancient, medieval or modern, but I cannot easily recall anyone so greedy about grabbing the mantle of a living political pattern as Mr Chandra Shekhar. The man wants to pretend that he is the chosen one to carry on the total revolution. He does not realise that he is just as ordinary as any of us.

The man has absolutely no creative or constructive political activity to his credit. But he has always had an uncanny sense of opportunity. He hunted with the hound when Mrs Indira Gandhi was in so many devious ways trying to make things uncomfortable for Mr Desai, then deputy prime minister in the loveless marriage of mutual political inconvenience which Kamaraj had contrived. He managed to run with the hare just in time to find some warren when things were becoming hot for him in the Congress party of Mrs Gandhi once she had found that she had no further use for him.

Why I am now saying all these unpleasant things about the Janata party president is because his activities in the past few days could do the nation much harm. He does not realise that Janata party politics can wait. It is not the most important thing for the people right now. What is important for the ordinary men and women in this country, who rarely get a chance, is that the government should be able to concentrate its mind on the real and critical issues of discipline in the security and industrial labour forces, economic stabilization by a fair distribution of the necessary sacrifices of income and consumption among various classes of the people and bringing together all sections of the community, irrespective of the political or class prejudices of certain ministers, into a common effort for increasing production, lowering manufacturing costs and keeping industrial facilities in a state of growth.

Fortunately the prime minister and the two deputy prime ministers, whatever may be lacking in their personal or political inter-relationships, now seem to be broadly in agreement on what needs to be done to put the country back on the rails. Is it not important that they should be allowed to do their job without their own party leaders sniping at them? This is why it is so wrong on the part of Mr Chandra Shekhar to exploit his right of entry to the penthouse of the Express Towers in Bombay to fire off one salvo after another at the prime minister and the government chosen by the party of which Mr Chandra Shekhar himself is the president. He must realise that, in other countries, when difficult national situations arise, ruling party bosses do not usually harangue prime ministers in public. This is true because they understand the dictum that, although courtesans have the prerogative of power without responsibility, this prerogative should be used normally in the bed-room. If this is true of democratic political systems where party organizations are properly organized down to the grassroots and functioning on a permanent basis, it must surely be very much true of the Janata party the president of which is so obviously finding it difficult even to organize normal and open means of financing the basic or day-to-day operations of the party without having to tap, directly or indirectly, funds of dubious origin.

Between Nayantara Sahgal and Arun Shourie—by the way one of the more interesting post-emergency marriage of minds among intellectuals in the capital—I very much doubt that special courts based on the Shah Commission report are the real menace Mrs Indira Gandhi faces. Indeed I should be surprised if the poor woman does not find herself in the dock to clear herself of all the many murders, suicides, accidental deaths, deaths by misadventure or even other deaths which might have been natural but could still have been timely from her point of view, which either the police have not investigated successfully or may be suspected of having shown no great interest in investigating or shown criminal interest in framing innocents. If you study the writings of the Sahgal-Shourie duo in the *Indian Express* you will find it difficult to resist the impression that Mrs Gandhi is nothing but a Jane, the Ripper, different from the infamous male precedent in the variety of situations and instruments in or with which she has been pursuing her personal plan of national population control.

In the circumstances I cannot respec the position taken by Mr Desai that, i any contempt of court has occurred, it i for the courts to take cognizance. Surely in the prevailing political climate relevan to this press campaign, engineere obviously by persons behind the scene who have authority over or influence wit the government, it is hypocritical to expec the subordinate judiciary particularly t have the courage to initiate contem proceedings. Again, what about the individuals who have been defamed? Man of them are functioning senior civil se vants. Does the government owe n duty to them and has it no interest i maintaining the credibility of its admini trative services even to the minimal extent?

V B

MOVING FINGER

Cover feature

Towards an information society

Indian attitudes to computer technology are curious in many ways. For instance, the plans of a pharmaceutical company in Bombay to replace its existing computer system with a more modern installation have been sufficient provocation for its staff to go on strike, although it has been painstakingly explained to the employees that no retrenchment is involved. At the same time, there has been a rather amusing advertisement in the press by an obviously enterprising establishment in Delhi, offering to match horoscopes with the aid of computers. We are ready, evidently, to marry the computers to the stars, but we seem to find it quite difficult to make adequate use of it for more mundane purposes.

In some of the large service organizations where computerization could bring enormous benefits to the public, employee resistance has been frustrating progress. A different kind of problem is encountered by a number of commercial or academic institutions which may not have problems with their staff, but are finding it difficult to procure suitable computer systems from foreign sources on which the country is dependant in this respect.

While Mr George Fernandes has succeeded in drumming out IBM, his ministry or the government as a whole has not shown any substantial results so far by way of making good the lost facility. There is, consequently, a growing volume of complaints that essential information processes in manufacturing, service and research organizations are being cruelly hurt by the simple non-availability of computers for love or money. This ought to cause us some concern since computerization has already been accepted as an essential feature of modern societies the world over.

The key role which computerization is already playing in industrial economies has been strikingly illustrated by Japan's intensive love affair with the computer. This feature is based on a highly informative account of "Japan computerized" appearing in a recent issue of **Mitsui Trade News.** *The Japanese experience is supplemented by an account of Sweden's effort to come to terms with the computer revolution in its own characteristic fashion.*

In a companion feature, Mr W. S. Titus surveys the Indian scene.

THE CUTTING edge of economic development in Japan, it is now being said, is shifting to the processing of information. Many Japanese business leaders or other opinion-makers have been talking for some time now of Japan's evolution into an "information society". Following from this is the claim that what steel is to the industrial societies computers are to information societies.

The ultimate for computerization might be push-button homes and computer by wire. Plans for central video networks and macro-computer systems have left their drawing board and entered the test stage. Dramatic as these possibilities are, the main business of computerization may continue with the business world even in Japan for some time more, although nowhere is the thrust of the information revolution more vigorous than in the Japanese economy.

Computers were put into service in Japan in the late 1950s. The first models had limited processing and memory capabilities but were still incredibly expensive. These were therefore a luxury of a few large organisations. The scenario was transformed by the mid-1960s, with the introduction of "third-generation" computers (those using integrated circuits) and this initiated a fierce price/performance competition among domestic and foreign manufacturers, sending capacities soaring while pushing down prices. As a result there was a qualitative change in the process of the computerization of Japan.

Today, besides being viewed as the centres of management information flows in a number of industries, computers have become a regular equipment in those manufacturing and service establishments where their abilities to save labour and increase speed in routine operations have become essential. Consequently, Japan is now the second largest computer market in the world, after the United States, and one of the fastest growing. An idea of the pace of growth of the "information society" in Japan may be obtained from the fact that the number of systems in operation went up by more than three times between March 1972 and June 1977, increasing from 12,809 to 41,929 during this period.

This development was helped by the fact that the cost of these systems, even in the face of inflation, increased only reasonably, i.e, by about 226 per cent thanks to the dramatic improvement in price/performance levels. The growing share of smaller computers in the total has also been a contributing factor. Users may derive additional cheer from the prospect that, with the introduction of fourth-generation computers (those using very large-scale integration semiconductors), they will be able to get even more computer power for their yen.

However, current worries over the course of the economy may dampen some of the immediate enthusiasm for Japan to get more computerized. According to a survey conducted by the Japan Information Processing Development Centre in the year 1977, only 59.6 per cent of computer users said that they were thinking of expanding their systems over the next five years; this compares with 66.3 per cent in fiscal 1976. Again, those users intending to expand said that they might increase the systems by an average of 1.9 times, about the same as in 1976. The life insurance, medical, agriculture and lumber industries have the biggest expansion plans relative to current use.

This somewhat subdued outlook for the proximate phase for the further computerization of the information society, however, may affect the larger systems rather than the small or very small size computers which have been recording a faster growth in the computer spectrum. In their case the annual growth of demand is expected to be in the region of 20 per cent in the context of a 10 per cent rise for computers in general. While Japan's small businesses employ small computers as stand-alone systems, these computers are also finding a variety of applications as parts of larger systems, as many kinds of computers network for serving all sorts of purposes are being designed.

In Japan, short of solving the metaphysical puzzle of which came first—the egg, or the hen—computer systems take care of all the problems of the poultry farmer.

Generation Gap

The generation of a computer is judged by the devices it uses—thus, from valve-based first generation to transistorised second generation to "chips" based third generation to complexly integrated "chips" systems of the fourth generation. As the generation goes forth, the size of the machine shrinks, while its speed and memory capability multiplies. The fifth generation computer being developed in the United States uses what is known as "bubbles memory", which is expected to further revolutionise computer technology.

From the users point of view, the generation of computers and their magnitude of capabilities are relevant only to the extent the machines are put to work by matching software abilities. An institution may install a fourth generation large computer and yet use it only as a third generation small machine, leading to what is known as "wastage of computer brain power" and the generation gap.

An interesting development is the building of inter-industry systems for specialized computers installed in different industries. For instance, the Mitsui Lumber Company, an integrated manufacturer of construction materials, has been employing this kind of network capability to move into the single-family home business. The principle of computer diversification is being applied in this case to cover data-processing for wage calculations, financial statements, cost accounting and calculations for housing loans, besides handling sales, inventory, freight, contract and other business data from the company's two factories.

Livestock farming is also being drawn into the dynamics of this information society. Mitsui and the Nippon Formula Feed Manufacturing Company have jointly developed a computer system called the Layer On-Line Check System(LOC), for helping poultry farmers to better manage the production of eggs. Fourteen principal factors such as the weights of good and bad eggs, number of eggs produced, deaths of hens, feed supply and yard temperatures and humidity, are inputted into the system. The system then outputs 71 sorts of data, including average figures to date for both the factory and the industry as well as daily figures.

The system thus enables breeders to eliminate guesswork and accurately grasp the current working conditions in their yards. Furthermore, feed supplies can be automatically calculated according to changes in temperatures and the number or weights of eggs produced. The breeder can also crank financial data into the system and get various management data, such as costs or production, profit/loss statements and balance sheets, for comparison with previous terms. Possibilities of further applications of this system are being studied and it is believed that it could be extended profitably to pig-breeding farms.

For the time being, however, small and very small computers for office use promise the fastest rate of growth in the small computer field. Over 12,000 computers were supplied in the fiscal year 1977, an increase of nearly 40 per cent over the previous fiscal year. It is estimated that more than 16,000 were supplied in fiscal 1978. Fiscal 1980 is expected to see over 20,000 systems delivered and over the next 10 years about 200,000 Japanese companies may be using a total of 300,000 office computers.

The companies in the distribution field, primarily wholesale and trading companies, account for 45 per cent of the organizations introducing office computers, while manufacturers follow with 28 per cent. Service industries, which are currently taking a 10 per cent share, however, show signs of greater increases. A very interesting fact is that half these firms are small businesses having less than 100 employees and annual sales of less than Y 2,000 million. Moreover single-family shops, accounting offices, gasoline stands and such very small companies are taking to office computers.

This trend is helped by attractive leasing arrangements. For instance, in a typical five-year contract the user pays a monthly fee equivalent to a little over two per cent of the purchase price of the system, making the fee for a small system range from around Y200,000 up to around Y 2 million, the exact rate depending on the interest rates prevailing when the lease is signed. When the lease expires, users can use the computers for one-tenth of the previous fee. About 80 per cent of the computers in Japan are leased.

The Japanese computer industry, however, has its Achilles heel. This is the lag in the development of computer software, where there have been no such quantum leaps in quality as have been achieved in respect of hardware. One of the practical problems the Japanese industry has to work on is creating software of Chinese-Japanese characters. Currently computer manufacturers, domestic and foreign and a government-sponsored research consortium have embarked on a massive software development programme.

A Japanese businessman called his computer "Geisha-II". He weaned himself from his favourite Geisha girl on all matters regarding "business wisdom and corporate decisions" and entrusted them to "Geisha-II". But he continued to go to the flesh and blood Geisha-I for emotional comfort.

Of pearls

When a peanut seller starts peddling pearls, for whatever reason, it is a misfortune to both the trades. What is happening to computer business in India is comparable to the above.

Trade unionists and political activists have been meddling in decision-making regarding technology development, import of advanced machines and application of computers. As a result, the nation is drifting towards a situation when the economy will not only be deprived of systems-based thrusts of dynamism, but might be caught up in sluggishness and confusion.

It is a well-established fact that no economic, technological, management, or other developmental activities of the magnitude and complexities as obtaining in a nation like India could be effectively tackled, unless the "intelligent machines"—computers — are used at decision-making and operational areas of management. It is almost unthinkable how load-intensive and high-speed operations, like communications, railways, civil aviation, banking and insurance, distribution of wage goods, generation and distribution of energy, etc, could be managed in the years to come with the rule of the thumb "techniques" which we are accepting today. (Here we are deliberately not discussing the requirement of defence and national security, because their very compulsions would force the import and indigenous development of the necessary technologies.)

What has been worrying the top economists and managers in the country is the dilly-dallying attitude towards employing computers in the key sectors of the economy. A case in point is the go-slow tactics of the Finance ministry on the computerisation of the Reserve Bank and the Life Insurance Corporation. No explanation is forthcoming from the august policy-makers as to how efficiency in the financial operations of the fast expanding banking and insurance systems could be achieved without the induction of advanced computer systems.

Why are computers useful in financial and other operational management as in banking, airline and railway reservations, etc.? The answer lies in their speed. The latest computers do calculations a hundred million times faster than the human brain. An advanced computer of today can perform as many as ten million additions each second, whereas an average human brain requires a second or more to do a single addition. When this speed is applied to decision-making and dealing with problems, an element of dynamism is imparted to complex operations of any kind.

The hide-bound trade union operators and insensitive political lobbies raise the scare that the computers would rob workers of their jobs. This is far from true. All that the "intelligent machines" might do is to liberate from drudgery men and women who are reduced to ledger-worms and make them available for services where the human touch is required.

Another impediment to the application of computers in the key sectors of our economy is the unending debate on matters like indigenisation of technology and import of machines. Nobody in his right senses would stand in the way of indigenisation of computer technology to the optimum capability obtaining locally at specified point of time, or its being updated constantly through research and development. This way, one cannot ignore India's commendable performance in recent years.

Experience, however, shows that, in the field of making advanced com-

and peanuts

puters, India is nowhere near the types that are being produced in a country like the United States. The reason for this is the high rate of obsolescence of specifications and technology in computers, non-availability of quality components and material, high cost of developmental overheads and the long gestation periods involved in developing systems.

While it is vital for India to develop local design and manufacture of certain complex models for defence and security purposes, and fairly large-scale manufacture of medium and small machines, it is absolutely uneconomical to go in for the commercial models with high-speed complex capabilities, which are needed only in small numbers at the present juncture.

Experience in the research and development for any advanced system is that the high costs involve serious funding problems. In countries where computer science has taken rapid strides finances made available for research are enormous both from government and private sources. The question is whether such finances will be forthcoming in India. The answer is: No. And, it will be wasteful at this juncture. Here it is necessary to point out that the scheme cleared for mini-computers nearly a year ago still awaits implementation.

For an adequate understanding of this fast-shifting technology, it is necessary to scan the short history of computers and the kind of "intelligent machines" in the offing. The first generation of computers, based on vaccum tubes, appeared in 1950. The second generation, which came nearly eight years later, was transistorised, and ten times faster. The third generation, based on "chips", was built in 1966. In 1973, the fourth generation, based on complex chips—each chip holding equivalent of more than a thousand vacuum tubes — came into being. Since then, the third and fourth generation computers have gone into considerable sophistication and miniaturisation.

The future scenario of computers offers some spectacular possibilities. The fifth generation of computers, which is expected to make the scene in a couple of years, will use "bubble memory", a new device a thousand times more compact than its predecessors, and make it possible to build machines of high-speed highly-complex problem-solving capabilities in miniaturised packaging.

Even more revolutionary electronic devices and three-dimensional tracery circuits, packed in single chips, are in experimental stage. It is quite possible that, by the turn of the century, the world will see the birth of compact computers with memory bank capable of "remembering and reasoning."

If we take these developments into account, we cannot afford to drag our feet and push our files at snail's pace, for such slow-motion luxury can be indulged in only at the peril of our being economically subjugated and the defences of our national life being laid open to external adventurism. Even big countries such as the Soviet Union and China shop around the world for advanced computer systems and technology for the "modernisation" of vital areas of the economy.

It is high time we became pragmatic in matters like computer technology in the interest of the nation. Cobwebs and cottonwool cannot go with the high efficiency world that is emerging.

W.S. Titus

Meanwhile Mitsui Knowledge Industry is concerning itself with software development for "total system" networks.

II

Computerisation arrived in Sweden much earlier than in Japan. In fact computer production had started as early as 1951, resulting in the successful all-Swedish electronic computer BESK (Binary Electronic Sequential Calculator) in 1953, a machine that at the time was considered to have the highest calculating speed in the world. This, however, is, in a sense, past history. American computer technology particularly has overtaken other national computer technologies, especially those of smaller countries. This has meant that, in smaller industrial countries, the emphasis is increasingly placed on the adequate use of computer technology rather than on production possibilities—a point which the self-reliance dogmatists in our midst surely ought to take note of. In Sweden itself computerization is being concentrated on applications in private and public organizations.

This pragmatic approach to the issues of world computer technology on the part of Sweden is underlined by the fact that the increased concentration of production of computer equipment and its economic and social implications were objectively studied in 1972-74 by the Computer Industrial Commission. The commission noted the very strong efforts in research and development of, primarily, the USA and Japan and admitted that small countries had to be realistic about their resource difficulties. In other words, a certain production dependence had to be expected by them. National data policies could help small countries in such areas as education, basic research and development.

At the same time the problem of domestic production of computer equipment was not overlooked although it was not until 1977 that a strong semi-public company Data-saab was formed. However, increased dependence on foreign suppliers with regard to electronic components has come more and more to the fore and this problem was reinvestigated last year, leading to the conclusion that one could foresee only limited possibilities of manufacturing for small countries even in this area. Research and development investment needs for micro-processor production are generally very high. This accounts for a strong centralization of efforts in those countries which have access to the resources needed. Nevertheless an attempt has been planned in Sweden for promoting some basic production within the prevailing constraints so that the country could keep up its competence in the manufacturing of electronic components.

According to a forecast made by the Commission on Computer Industry, set up by the National Industrial Board, the market trend for computers in Sweden points to an annual growth of more than 20 per cent. Owing to an increased concentration on terminal-based systems the markets for terminals is expected to grow quickly. The proportion of small computers is also expected to increase. Data processing technology, however, cannot be isolated from other types of technology. For example, the need for dependence on well-functioning telecommunication technology and satellite traffic has increased. According to Mr Jan Freese, Director-General of the Data Inspection Board, this dependence will increase in the near future as a public data network will be put into operation in 1979 to form a part of a Nordic network. Later on this will probably be coupled to other national or international networks.

In the United States, a computer hire service named its latest model, "Vendy Broad," and called on customers to take "full advantage of her capacity to satisfy." The slogan of the hire service was; "Match the hard and softwares to get the oomph !"

The government in Sweden has been taking an active interest in the formulation of a national data policy. Since the major part of Swedish industry is in the private sector and is carrying out its own rationalization schemes, industrially oriented processing policies are to a large extent taken care of by industry itself, with participation by the public authorities. Nevertheless, the latter have some important obligations, for instance, data network communication, educational programmes, research and development in universities and data processing legislation.

The technology that allows computers to ape human speech is advancing so fast that a talking machine with unlimited human vocabulary may be only a few months away. It is more difficult to train the computer to hear the human voice, as well as reproduce it, but that technology is also on the move. Several new products incorporating either voice synthesis (speech) or voice recognition (hearing) were announced in the United States recently.

Again the increasing employment problems in many sectors of society nowadays tend to step up the demand for greater cooperation between the private and public sectors. Already public information processing and data bases are exceptionally well developed in Sweden.

Consequently, the economic and social impact of computerisation, given the Swedish ethos, has become a matter of prime national concern. For instance, the question of high computerisation affecting the right of citizens to privacy has been studied in depth and the possible problems taken quite seriously. In Sweden all citizens have for more than 200 year been granted free access to all unclassified public documents, e.g. documents that have been received or issued by central or local government agencies. In 1966, however, a parliamentary commission noted that the Freedom of the Press Act could be affected by applying the new technology. The implication was that legislation would have to be undertaken to protect the privacy of citizens.

Following the passage of the Swedish Data Act, the Data Inspection Board has been set up with authority to grant licences to those who keep personal files and to monitor compliance with the Act. Anyone who wishes to set up a computerised file containing personal data must first obtain a licence. This is granted if there is no room to assume that undue infringement of the registered person's privacy will arise. Another area of concern is that since data processing technology has contributed to the increased vulnerability of the modern highly industrialised society, it can be of great consequence to national security policy. Vulnerability can be critical not only—nor even primarily—in war situations but also situations where threats and pressures are directed against society in peace time. The risks accompanying terrorist activities also come into the picture. These problems are being studied in detail by the Commission on Vulnerability. The general conclusion is that vulnerability today is unacceptably high.

The extensive flow of personal data across national borders could also create problems. The greater the flow of various kinds of data across national borders, the greater becomes the degree of dependence on stable political conditions both

Indian technology on the move

IBM World Trade Corporation phased out its operations in India in May last year, after refusing to bring down its foreign equity as required by the Foreign Exchange Regulation Act. The former IBM personnel formed a cooperative and started a wholly Indian owned company under the flag, International Data Management (IDM). The new company took over IBM's data centres and data card manufacturing facilities in Bombay ensuring continuity of services to erstwhile IBM customers.

With its talent and management pool, the IDM is fast expanding its operations, including manufacture of latest generation computers and import of such systems which are not made indigenously.

IDM recently signed an agreement of "mutual relationship" with Prime Computer Company Inc, a fast growing computer company of the United States. Under the agreement, the American partner will provide latest technological know-how to IDM, and both will undertake third country operations. Tatas have also entrusted their NELCO-3000 business systems to IDM for operational details.

The International Computers Ltd (ICL) which has been operating in India, reduced its equity to 40 per cent, under the FERA, and formed a new company, International Computer India Manufacturer (ICIM), which has undertaken the building of system 2903/04, a fourth generation model.

The public sector Electronics Corporation of India Ltd (ECIL) is another leading computer manufacturer in India. Concentrating mostly on smaller machines, the ECIL has undertaken the manufacture of their versatile micro-computer—78. According to an Electronics Commission estimate, 75 per cent of computer requirements of India could be met at the present juncture through mini-computers of the type TDC-120. ECIL also makes models TDC-132 and TDC-316, which have more complex systems capability. The company has developed a large computer in the fourth generation range, TDC-332.

in the processing countries and in those countries through which information is transmitted. There is, therefore, a risk that the new dimensions of transborder data flow will cause a new national protectionism which may become troublesome. As Mr Freese puts it, perhaps the free flow of information will probably have to be regulated by international agreements in order to be kept free.

Finally much thought is being given in Sweden to the impact of computerisation on labour. Working conditions in most branches of public administration, industry and commerce had undoubtedly felt the effects of computer technology. While computerisation creates new opportunities for the development of human and institutional efficiency, it has at the same time made great demands on readjustment and renewal of mental attitudes and organiztional structures. The character of office work has already changed greatly.

Computers are also being used increasingly for specialised tasks in the communications sector, e.g. for the supervision and control of aviation, ships, telecommunication and railway operations. Extensive computer systems are used in medicines, for patient data and clinical support. In industry computers are employed more and more in various production processes as the trend towards automation strengthens. About 600 industrial robots were to be found in Swedish industry in 1977 in processes involving heavy monotonous jobs or unpleasant work environment.

In many cases computers have reduced the need for office staff which means that unless the service sector continues to increase its total employment, this kind of computerisation might lead to problems of unemployment. The introduction of electronics is also rendering certain occupational groups redundant in the graphic industry and parts of the communication field. Employment in the manufacturing sector has also been affected to some extent.

Thus computerisation faces society with possible effects which may be intended or even justifiable in the strictly material cost-benefit terms. At least this seems to be the dominant Swedish view. No office or factory, it is pointed out, has yet been computerised without deep, sometimes, radical changes in its very nature. If the computer is to do its job properly, it makes demands on the accuracy and the regular flow of the work done outside it, demands that may be of an entirely new nature. In the initial stages (these may often continue for quite a long time), computers may demand more manpower than before, not less. It is also possible that, in practice, large adminitrative computer systems may not achieve lower user costs. They may, however, allow the administrators or workers to achieve better results or different results. Nevertheless, the real cost-benefit balance remains a complex puzzle. Consequently, Swedish data policy remains a continuing subject for high level study and it is possible that legislation may be enacted in the current year laying down the principles and instruments for a coordinated data policy.

Resource mobilisation in Uttar Pradesh

P. K. Bhargava

Uttar Pradesh must mobilise whatever additional resources it can to avert any further worsening of its economic condition and to impress upon the centre the earnestness of its desire for faster progress, says the author who is Reader in Economics, Banaras Hindu University. He believes that there exists scope for additional resource mobilisation and suggests ways and means to do so. Agriculture, he considers, as a major source from which the state can garner additional funds. He suggests introduction of tax on trades and professions and streamlining the working of irrigation and power schemes.

UTTAR PRADESH, the most populous state of the country, has continuously suffered during the process of planned development of the country : the per capita income of the state is abour 30 per cent below the all-India average at present, although in 1950-51—the last year of the pre-plan period—the per capita income of the state was five per cent above the all-India average. It is, therefore, necessary that the state must develop at a rate faster than the rate at which the national economy is likely to grow. This requires relatively greater investment in the state than the investment hitherto made so that the leeway to some extent, can be made up or, at least the further deteriorating economic condition of the state is arrested.

The state government had originally proposed to the Planning Commission a plan with the outlay of Rs 7,800 crores during the period 1978-83. The Planning Commission pruned it to Rs 4,300 crores on the ground that the state had not made adequate efforts to mobilise its own resources. Thereupon the state government proposed an alternative plan with an outlay of Rs 5,500 crores which has also not received the approval of the Planning Commission as yet. Such a situation is not healthy from the point of view of already deteriorating economy of the state. In order to foster its development, the state must mobilise whatever additional resources it can raise to impress upon the centre for higher outlay during the period 1978-83 so that the state's economic condition may not worsen. The state government appointed the UP Taxation Enquiry Committee in April 1979, under the chairmanship of Dr R.J. Chelliah, to suggest ways and means to raise additional resources during the period 1978-83. The state has not mobilised its resources adequately in the past and there is good scope for raising additional resources by the state government on the lines indicated below.

That the government of Uttar Pradesh has not mobilised adequately its own resources is evident from the fact that in 1977-78 (budget), the revenue from state taxes in Uttar Pradesh formed 5.78 per cent of the state income whereas the states of Karnataka (11.31 per cent), Kerala (9.62 per cent), Madhya Pradesh (7.50 per cent) and Rajasthan (6.35 per cent) raised relatively higher percentages of their income through state taxes,* although the per capita income of these states is lower than that of UP. Similarly, the per capita revenue from state taxes in Uttar Pradesh in 1977-78 (budget) was Rs 44.41 as against an average of Rs 71.60 for all the states during that year. Even relatively backward states of Karnataka (Rs 89.26), Madhya Pradesh (Rs 57.23) and Rajasthan (Rs 54.87) had higher per capita revenue from state taxes during that year than Uttar Pradesh. These data clearly indicate that there exists scope for raising additional resources by the state of Uttar Pradesh.

Uttar Pradesh has a predominantly agricultural economy. The contribution of agriculture in the state income is about 58 per cent as against 42 per cent for the country as a whole. It is, therefore, necessary that adequate resources should be raised from the agricultural sector. There is abundant evidence to show that in recent years the tax paying capacity of the agricultural sector, especially the large land-holders, has increased considerably due to increase in agricultural income owing to a rise in the price of agricultural products and productivity of land. During the decade 1960-61 to 1970-71, the income from agriculture and allied activities (at current prices) in the state increased by about 140 per cent. During the same period, the index of agricultural wholesale prices (base year 1957-58=100) increased by 90 per cent. The agricultural production in the states during the period 1948-49 to 1971-72 increased by 184 per cent.

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*The percentages for different states have been calculated on the basis of states' income for 1975-76.

There has also been substantial increase in the yield per hectare of all major crops during the period 1950-51 to 1970-71, the yield of wheat per hectare increased from 8.19 quintals to 13.29 quintals, of rice from 4.86 quintals to 8.01 quintals, of maize from 7.85 quintals to 11.90 quintals and of sugarcane from 291.03 to 406.42 quintals. The agriculturists have also improved their relative position as the expenditure policy of the state has been highly agricultural-oriented.

various subsidies

In the planning era, the state government has spent more than 60 per cent of its total plan expenditure on agricultural programme, community development, cooperation, irrigation and power. Besides, the state government has been giving various kinds of subsidies from time to time to agriculturists : for instance in October 1978 the state government decided to continue the facility of providing subsidy on prices of phosphatic and potassic fertilisers to farmers and a provision of Rs 8 crores was made in the farmers benefit fund for the purpose. The quantum of subsidy was 25 per cent and 33.5 per cent to small and marginal farmers, respectively, and a subsidy of 20 per cent to all farmers to augment the production of pulses. Besides, the state government has taken steps from time to time to provide relief to the agriculturists. In June 1978, on the eve of the completion of one year of Janata government in the state, Mr Ram Naresh Yadav, the then chief minister of Uttar Pradesh, claimed to have infused new life into the ailing economy of the country's most populous state by abolishing land revenue on holdings up to 3.12 acres and development cess on bigger holdings to give relief to the rural community to the tune of Rs 34 crores. Such decisions are good from political point of view but have far reaching undesirable repercussions adversely affecting the development of the economy of the state and of neighbouring states too.

declining contribution

In Uttar Pradesh, the only taxes that are levied on the agricultural sector are land revenue, agricultural income tax (replaced by large holdings tax) and cess and purchase tax on sugarcane. The contribution of these taxes in the states tax system has been declining progressively : in 1951-52 the share of these taxes in the revenue from state taxes was 43 per cent which declined to as low as 8.4 per cent in 1977-78. Land revenue is levied at a flat rate and has been fixed in money terms for a number of years. The average land revenue per acre in Uttar Pradesh is about Rs 4.50 to Rs 5 per acre. However, land revenue rates cannot be changed at the present time. Accordingly, we think that a surcharge on land revenue should be levied in the state on a sliding scale.

As a measure of fiscal reform the state government should abolish land revenue on holdings of 2.5 acres or less as the total yield from the holdings of this size is about 10 per cent of the yield from land revenue in the state, whereas the number of households with less than 2.5 acres holdings form about 60 per cent of the households paying land revenue in Uttar Pradesh. To make the proposal politically more acceptable, holdings over 2.5 acres, but not exceeding 5 acres, may be exempt from the proposed surcharge. Such holdings account for nearly 20 per cent of the total households. Thus the proposed scheme will receive support of 60 per cent of the households who will not have to pay land revenue; and will not be opposed by another 20 per cent of the households who will pay land revenue. It would, therefore, be politically feasible for the government to implement the proposed scheme.

Households with 5 acres to 10 acres account for nearly 20 per cent of the households and own nearly 30 per cent of the total area. The imposition of 50 per cent surcharge on such holdings may yield approximately Rs 2.50 crores per annum. It is estimated that households with holdings of 10 acres to 20 acres own 20 per cent of the total area and account for five per cent of the total households paying land revenue. The imposition of 100 per cent surcharge on such holdings may yield approximately Rs 7.50 crores annually and a surcharge of 250 per cent on households having 20 acres and above, which account for nearly three per cent of the total households paying land revenue and occupying nearly 20 per cent of the total area, may bring Rs 10 crores per annum to the state exchequer. In this way it may be possible to increase the yield from land revenue by about Rs 20 crores per annum. As a result of abolishing land revenue on holdings of 2.5 acres or less the state government will incur a loss of about Rs 2.50 crores. Thus as a result of the proposed surcharge on big cultivators and the concession to small cultivators the net yield may be Rs 17.50 crores per annum. It may be cautioned here that the scheme may encourage sub-division of land holdings. It is, therefore, necessary that the government simultaneously takes steps to check such sub-division.

commercial crops

Commercial crops are usually more paying to the agriculturists and it should b possible to impose an additional tax o them. In Uttar Pradesh the main commercial crops are oil-seeds and sugarcane The total area under them was abou 5.43 lakh hectares in 1971-72. A surcharge or cess at a progressive rat of Rs 4 to Rs 7 per acre may b levied on them. The rate may be Rs per acre in the case of holdings up to fiv acres. The tax on holdings exceeding acres and upto 10 acres may be Rs 5 pe acre rising to Rs 6 per acre on holdin between 10 and 20 acres and to Rs 7 pe acre on holdings exceeding 20 acres. Thes measures would yield an additional i come of about Rs 5 crores per annum.

The per capita yield of sales tax i Uttar Pradesh in 1977-78 (Budget) wa Rs 23.18 as compared to the correspon ing figure of Rs 40.66 for all states in that year. Even the relatively backward states such as Rajasthan (Rs 30.79), Madhya Pradesh (Rs 31.21), Orissa (Rs 25.30) and Karnataka (Rs 46.06), whose per capita income is lower than that of UP, had higher per capita sales tax revenue during that year. It is thus necessary to tighten the administrative machinery to check evasion of the tax and realise arrears of revenue. One of the important ways of checking sales tax evasion could be that the goods consigned to a businessman in any part of the state should be delivered only when the necessary documents are endorsed by the sales tax officer of the area. If this is done then it will be necessary for a dealer to record the sale of the goods. There should also be frequent surprise checking of stock registers of the dealers by the sales tax inspectors and officers.

rationalisation of tax

There is also a case for rationalisation of sales taxation and its more effective assessment and realisation than at present. For this purpose, it will be necessary to rationalise the rate of tax on a number of commodities and to bring other commodities within the tax net which are now left free. This will necessitate a study of elasticity of demand and consumption pattern of different income groups to make the tax more equitable. It will also be necessary to have proper coordination with neighbouring states so that the tax may not be avoided by diverting purchases to adjoining states where the tax rates may be relatively lower. Through these measures the state government should aim at raising an additional revenue of about Rs 25 crores per annum, so that the per capita yield of tax may rise to Rs 30. Even then the per capita yield will reach the level of relatively backward states such as Rajasthan and Madhya Pradesh whose per capita income is lower than that of Uttar Pradesh.

Under the existing arrangement of the Central Sales Tax Act, the tax is assessed and collected by the exporting states. Thus the incidence of the tax is borne by consumers in the importing or consuming states. However, the residents of the importing state do not benefit from the expenditure incurred out of the revenues so derived by the exporting state and they do not have any voice in deciding how this revenue is to be spent. This creates inter-state jealousies and a fiscal inequity. Most of the exporting states, except Bihar, have relatively high per capita income and are better off while the importing states are relatively poor and backward. Thus the relatively rich states are allowed to tax the residents of relatively poor states.

lacking in equity

From the point of view of equity, this is undesirable. The major beneficiaries are the main producing states and about 55 per cent of the total revenue from central sales tax is derived by the four states of Maharashtra, West Bengal, Tamil Nadu and Gujarat.* It would be in fitness of things if the existing provisions for the assessment and collection of the tax were revised so as to pass on this right to the importing states. This will increase the revenue of relatively backward states like Uttar Pradesh and at the same time ensure that the revenues accrue to the importing/consuming states where the incidence of the central sales tax falls.

The return on various irrigation projects and electricity schemes has been inadequate keeping in view the large amount of capital that has been invested by the state government. In fact, the state government has been incurring substantial losses on irrigation projects and the losses on minor irrigation alone in the state in 1978-79 are estimated at about Rs 27 crores. If the losses from minor irrigation can be reduced progressively, a substantial amount of resources could be released for development purposes. In this context I agree with the observation of the report of the Finance Commission (1978, p 24) that "....with due attention to maintenance, and determined efforts to maximise utilisation of the potential available we see no reason why the present burdens on the state budgets by way of losses in these schemes, should not be reduced substantially. For instance, we have been informed that even in tubewell systems in a few states the actual irrigation is perhaps about 60 per cent of the potential, for various reasons like non-completion of the channels, irregular availability of power, etc. Such deficiencies can certainly be set right".

As for the return on electricity schemes the scope of raising power rates is limited as it will adversely affect the industrial and agricultural development of the state; it is however necessary that the state electricity board concentrates on increasing the efficiency of electricity schemes so that the cost of production may come down. The Planning Commission has suggested that the working expenses in UP at the current rate of 10 paise per Kwh are extremely high as compared to the corresponding figure of 7 to 7.5 paise per unit for all states. It is estimated that a reduction of one paisa per Kwh in working expenses will ensure an additioaal sum of about Rs 10 crores per annum to the state exchequer.

urban property tax

The government of Uttar Pradesh had imposed a tax on the owners of land and buildings in urban areas with effect from July 1, 1962 but the tax was abolished from April 1, 1967 because of the difficulties involved in administering it. Since the local bodies were responsible for the assessment, the annual value of land and buildings was often under-assessed because the officers of local bodies were subject to local pressures. In view of the urgency of additional resources, the state government should think of re-introducing the tax and to remove the earlier difficulty regarding assessment. The state government should provincialise the services of assessment officers so that the annual value of taxable land and buildings may be fixed on a scientific basis.

The state government could also think of introducing a tax on trades, professions, callings and employment. No doubt, it is a bad tax because it involves a kind of double taxation. However, the constitution has reduced the incidence of double taxation by fixing a limit of Rs 250 per annum per assessee. In case the state government decides to introduce the tax, there should also be a provision for deducting the amount collected by the

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*See the author's paper 'Sales Tax : Administrative Reform Needed', *Capital*, July 7, 1977.

local bodies which they levy on the same tax base as is to be used by the state government so that the residents of those districts, where the local bodies are also tapping this source of revenue, are not doubly taxed. Agriculturists, should also not be exempt from this tax as they were exempt when the state had levied this tax. There will certainly be some administrative bottleneck in it and the state government may have to tighten up its administration to effectively implement the tax.

Capital mobility and monetary unification in EEC

V. K. Bhalla

An important component of monetary union in the EEC is the free movement of capital. The advance of economic integration in western Europe is to be accompanied by financial integration of the money and capital markets of the member states. But this integration, according to the author who is Reader in the Faculty of Management Studies, University of Delhi, involves a painful process of establishing in each member state national priorities that are compatible with those of other states. His analysis indicates that the member states of the EEC do not show any strong trend of financial market integration.

FINANCIAL MARKETS under fixed exchange rate are linked by a high degree of capital mobility which limits the control of any individual monetary authority over its money supply and interest rates. With capital movements responsive to relative interest rate incentives, a change in monetary policy in any one market induces offsetting capital flows which modify the domestic impact of that policy. Moreover, offsetting capital flows transmit the impact of the change in monetary policy from one country to another. Capital mobility thus poses a significant threat to monetary independence.

An important component of monetary union is the free movement of capital. Since in the case of the EEC countries, exchange controls were eliminated for almost all current account transactions in the late 1950s, the question of full convertibility has been practically identified with freedom of capital movements.[1] In fact, the advance of economic integration as an emerging reality in western Europe is likely to be accompanied by a financial integration of European money and capital markets.

With some over-simplification one can establish definitions of integration of increasing rigour as :

(a) free trade (the major element in the Tinbergen prescription);[2]

(b) the absence of all forms of discrimination (Balassa)[3] presumably going beyond merely free trade into wage, tax and other aspects of economic policy which might infringe on trade ;

(c) factor price equalisation (Myrdal).[4]

With appropriate qualification, all these definitions can amount to the same thing. An integrated capital market may discriminate, however, among borrowers, the size of their assets and risk element of their business, the size of their assets, their past financial record, and other such factors, but not according to the region where they operate.

Given the characteristics of the national financial markets and disparity among the EEC member states[5] integration of financial markets (as opposed simply to free convertibility and removal of controls over capital outflows) involves a painful process of establishing in each member state national priorities that are compatible with those of the others and of harmonising financial regulations and structures.[6] The expected benefits must then be sizeable if the EEC member countries are, as it appears, willing to undertake these burdens.

Integration of financial markets, taken to mean that national borrowers and lenders have meaningful alternatives for sources and uses of funds in other countries, may give rise at least to two identifiable economic benefits as well as to other advantages in the context of economic integration in general. First, the integration of financial markets by increasing the effective size of the market, may lead to operational economies of scale; i.e., to enhance the operational efficiency of the market. This means that the economic resources employed in transforming a given amount of savings into investment is re duced. It may occur by means of large underwritings of securities, narrower spe cialisation by financial institutions, lowe cost per unit of obtaining financial in formation and greater competition i financial markets.

allocational efficiency

Second, financial-market unification ma improve the allocational efficiency of th financial process. This comes about be cause the borrower of one nation has broader spectrum of sources of fund open to him, and he may be able t choose a cost-repayment combinatio more to his liking than would be th case if he was confined to his nation market. Likewise, the savers may be ab to choose a more efficient risk-retur combination by diversifying their ass portfolios internationally. Furthermor the risk-return spectrum faced by inve tors may itself be transformed as a resu of the deepening and widening of the fina cial markets. Increased secondary mark activity, which would likely accompa integration, may reduce anticipated flu tuations in yield or reduce the risk wi constant return. To the extent that org nised money and capital markets becon more active with integration, the liquidi of marketable securities is increased a the 'money-risk' reduced.[7]

Another result of improving allo tional efficiency is that discontinuities the range of available financing wh existed in isolated national markets n sappear with integration. The maxi-um size of firm that can be financed is creased. If the rationalisation of in-strial structure is a goal for the integra-on process, an integrated financial arket may be necessary to provide nancing for the optimum-sized large rms that would, come up.

Integration of financial markets may us be an important complement to the tegration of goods and labour markets. y equalising borrowing costs among untries, competitive distortions among rms, based on nationality, are reduced. tegrated financial markets would per-it the optimum-location of new indus-y to minimise transport costs, an opti-isation that might not be possible with customs union alone.

loss of independence

Along with these benefits, the integra-on carries considerable costs in indepen-ence and sovereignty over economic olicy for the integrating nations. Inte-ration of financial markets involves a ss of independence in two basic areas :

First, the degree to which an indivi-ual nation may influence its own mone-ry aggregates in the pursuit of indepen-ent economic stabilisation is greatly re-uced. This would be true whether a onetary union were quickly established rly in the integration process or a ower step-by-step removal of controls ver capital flows and elimination of dis-rtive regulations and taxation policies ere used as the strategy to accomplish e integration. The ability, for exam-le, of one member to lower interest ates of other members, would be cir-umscribed if, in fact, alternative sour-es and uses of funds were readily avail-ble without reference to nationality. imilarly, the supply of credit within one ember state could not be independently etermined if full integration existed. Des-ite the tendencies in the EEC to elimi-ate external investment controls, mem-ers retain enough independence in the ormulation and execution of monetary olicy to prevent an advanced state of ntegration of financial markets. Subse-uent analysis will make it clear.

A second facet of the loss of national olicy independence involves the ability to guide the flow of saving into preferred channels of investment. Some EEC countries rely heavily on the controls of the allocation of credit to influence the structure of investment spending While theoretically fiscal incentives could be substituted for selective credit policies, in practice the latter are both politically and administratively more feasible.

two alternatives

This conflict between financial integration and independence in controlling the allocation of credit is magnified because the EEC members have rather different types of financial structures and institutions. And the structural goals that are the object of allocational credit policy also differ from member to member. Thus a high degree of financial market integration must inevitably reduce the efficacy of a credit policy designed to produce a desired allocation of real resources. If financial markets are to be integrated, either the selective credit controls must be given up in favour of economic efficiency or the structural priorities of the integrating members must be made compatible

A different question may arise as to whether a high or low degree of financial openness or integration would be more conducive to the smooth working of a specified monetary arrangement. The conjecture seems plausible that great financial openness is more conducive to the smooth working of either extreme monetary independence or extreme monetary unification than to some intermediary monetary arrangement. At the one extreme, a large volume of actual and potential capital movements, free of controls, would link the foreign exchange market and the money and capital markets in different regions together, lending breadth, depth and resiliency to each, lessening the likelihood that random imbalances of supply and demand arising from commercial transactions would cause sharp exchange rate fluctuations, and facilitating stabilising speculation. At the other extreme of the monetary unification, highly interest-sensitive capital movements would readily finance interregional balance-of-payments imbalances[8] while the corrective processes characteristic of unification were at work. These corrective processes would themselves be enhanced by ready marketability of important categories of financial assets throughout all regions of the monetary union. Changes in the ratios of assets to income and of inter-regionally marketable local assets in portfolios would motivate persons and firms to make readjustments tending to restore interregional equilibrium on current account. This asset-transfer adjustment process would work better if investors were wealthy enough to hold large portfolios[9] relative to income, and if wealth, tastes, economic organisation, and the like were similar throughout the monetary union. Under such circumstances, tight monetary unification would itself lessen the danger that unification would break down.

a danger

That danger is relatively great, however, under the intermediate arrangement of distinct currencies pegged together at irrevocably fixed exchange rates. Capital movements become highly sensitive to interest and profit incentives. But as long as the member regions of the union have separate currency reserves with which to carry out exchange-rate pegging and have the potential for balance of-payments problems, one currency will occasionally come to be regarded as stronger or weaker than the others, and one-way-option speculation may become massive as "everybody begins to expect the irrevocable to be removed".[10]

The experience of the EEC countries shows the inclination of the investors for some currencies. The results obtained from Fisher's tests [11] are shown in Table I. This table shows that interest rate differential is not equal to the anticipated rate of changes in exchange rate. The Fisher hypothesis has been tested by comparing interest rates on assets of similar maturities denominated in other currencies. The table shows the interest rate in each of the member states of the Community, the interest agio with the dollar, and the percentage change in the exchange rate relative to the dollar, both for the ninteen years period, and for each of the 19 years. A positive entry for the interest agio indicates that the foreign interest rate is higher than the

TABLE I
Tests for the Fisher Effect

Belgium/Luxembourg

	Interest rate	Interest agio	Annual change in exchange rate	Net
	1	2	3	(4)=(2)+(3)
1958	1.41	—0.43	—0.34	—0.09
1959	1.47	—1.95	0.20	2.15
1960	2.79	—0.15	—4.90	3.75
1961	2.56	0.18	—0.15	3.33
1962	2.11	—0.67	—0.06	0.61
1963	2.29	—0.87	0.16	—1.03
1964	3.35	—0.20	—0.40	0.20
1965	3.14	—0.80	0.02	0.82
1966	3.89	1.00	0.82	0.18
1967	3.19	1.14	—0.84	1.98
1968	2.84	2.51	1.02	1.49
1969	5.40	1.29	—0.94	2.23
1970	6.25	0.19	0.02	0.21
1971	3.70	0.64	—10.43	10.21
1972	2.46	—1.61	—0.02	1.59
1973	4.80	—3.60	—6.23	2.63
1974	9,27	1.40	—12.58	13.98
1975	4.65	—1.17	9.43	—8.26
1976	8.31	3.32	—8.97	12.29

Denmark

	Interest rate	Interest agio	Annual change in exchange rate	Net
	1	2	3	(4=2+3)
1958	4.50	2.66	—0.11	2.77
1959	5.00	1.58	0.03	1.55
1960	5.50	2.56	—0.03	2.59
1961	6.50	4,12	0.29	3.83
1962	6.50	3.72	0.24	3.48
1963	5.50	2.34	0.11	2.23
1964	6.50	2.95	0.11	2.64
1965	6.50	2.55	0.43	2.12
1966	6 50	1.62	0.38	1.24
1967	7.50	3.17	0.78	2.39
1968	6.00	0.65	0.67	—0.02
1969	9.00	2.31	—0.01	2.32
1970	9.00	2.56	—0.01	2.57
1971	7.50	3.16	—0.57	2.73
1972	7.00	2.93	—3.04	5.97
1973	9.00	2.97	—12.63	13.49
1974	10.00	2.13	—10.17	12.30
1975	7.50	1.68	9.34	—7.66
1976	10.00	5.01	—6.31	11.32

France

1958	6.49	4.65	0.06	4.59
1959	4.07	0.65	—0.12	0.77
1960	4.08	1.14	0.06	1.08
1961	3.64	1.27	—0.02	1.29
1962	3.62	0.84	0.00	0.84
1963	3.98	0.82	0.04	0.78
1964	4.70	1.15	—0.04	1.19
1965	4.18	0.23	0.04	0.19
1966	4.79	—0.09	1.01	—1.10
1967	4.77	0.44	—0.89	1.33
1968	6.21	0.86	0.81	0.05
1969	8.97	2.29	11.63	—9.34
1970	8.67	2.24	0.69	1.55
1971	5.84	1.50	—5.51	7.01
1972	4.95	0.88	—1.93	2.81
1973	8.09	1.21	—8.14	9.35
1974	12.91	5.04	—5.56	10.60
1975	7.92	2.10	0.92	1.18
1976	8.58	3.57	10.79	—7.22

West Germany

1958	3.08	1.24	—0.57	1.81
1959	2.69	—0.73	0.19	—0.92
1960	4.55	1.61	0.01	1.60
1961	2.96	0.59	—4.81	5.39
1962	2.68	—0.10	0.05	—0.15
1963	2.97	—0.19	—0.58	0.39
1964	3.29	—0.27	0.05	—0.32
1965	3.82	—0.13	0.73	—0.56
1966	5.34	0.64	—0.73	0.54
1967	3.35	—0.98	0.55	—1.74
1968	2.58	—2.77	0.18	—2.59
1969	4.81	—1.88	8.07	6.19
1970	8.67	2.23	—1.14	3.37
1971	6.06	1.72	—11.00	12.72
1972	4.30	0.23	—2.02	2.25
1973	10.19	3.31	—15.58	18.89
1974	8.87	1.00	—10.88	11.88
1975	4.41	—1.41	8.83	—10.24
1976	3.89	—1.10	—9.91	8.81

Tests for the Fisher Effect—*Contd*

Ireland

	1	2	3	(4=2+3)
1958	4.25	2.41	—1.91	4.32
1959	4.25	0.83	—0.09	0.92
1960	4.62	1.68	0.14	1.54
1961	5.56	3.18	0.13	3.05
1962	3.86	1.08	0.16	0.92
1963	3.98	0.82	—0.18	1.00
1964	6.81	3.26	—0.19	3.45
1965	5.88	1.93	—0.26	2.19
1966	6.87	1.99	0.41	1.58
1967	7.78	3.45	13.75	—10.30
1968	7.17	1.82	0.91	2.73
1969	8.25	1.56	0.68	0.88
1970	7.31	0.87	—0.29	1.16
1971	4.81	0.47	6.61	– 6.14
1972	8.00	3.93	—8.09	12.02
1973	12.75	5.72	1.06	4.66
1974	12.00	4.73	1.09	3.04
1975	10.00	4.18	—13.74	17.92
1976	14.75	9.76	—15.87	25,63

Italy

	1	2	3	(4=2+3)
1958	3.50	1.66	—0.14	1.80
1959	3.50	0.08	—0.56	0.64
1960	3.50	0.56	0.00	0.56
1961	3.50	1.12	0.00	1.12
1962	3.50	0.72	0.00	0.72
1963	3.50	0.34	0.39	0.05
1964	3.50	—0.05	—0.39	0.34
1965	3.50	—0.45	0.01	—0.46
1966	3.50	—1.38	—0.04	—1.34
1967	3.50	—0.83	0.22	—1.05
1968	3.50	—1.85	—0.05	—1.80
1969	3.75	—2.94	0.33	—3.27
1970	5.50	—0.94	– 0.41	0.53
1971	4.50	0.16	—4.49	4.87
1972	4.00	—0.07	—1.89	1.82
1973	6.50	—0.53	– 4.36	3.83
1974	8.00	0.13	6 83	—6,70
1975	6.00	0.18	5.25	—5.07
1976	15.00	11.01	28.00	—16.99

Netherlands

1958	3.00	1.16	—0.42	1.58
1959	3.50	0.08	—0.13	0.21
1960	3.50	0.56	0.00	0.56
1961	3.50	1.12	—4.51	5.63
1962	4.00	1.22	0.00	1.22
1963	3.50	0.34	0.00	0.34
1964	4.50	0.95	—0.22	1.17
1965	4.50	0.55	0.53	0.02
1966	5.00	0.12	0.08	0.04
1967	4.50	0.17	—0.50	0.67
1968	5.00	—0.35	0.28	—0.63
1969	6.00	—0.69	0.50	—1.19
1970	6.00	—0.44	—0.75	0.31
1971	5.00	0.66	—9.54	10.20
1972	4.00	—0.07	—0.86	0.81
1973	8.00	0.97	—12.46	13.43
1974	7.00	—0.87	—11.24	10.37
1975	4.50	—1.32	7.26	—8.58
1976	6.00	1.01	—8.61	9.62

United Kingdom

1958	4.56	2.72	—0.16	2.88
1959	3.37	—0.05	0.09	—0.14
1960	4.88	1.94	0.13	1.81
1961	5.13	2.75	—0.15	2.90
1962	4.18	1.40	0.20	1.20
1963	3.66	0.50	0.20	0.30
1964	4.61	1.06	0.25	0.81
1965	5.91	1.96	—0.45	2.41
1966	6.10	1.22	0.45	0.77
1967	5.82	1.49	14.77	—13.28
1968	7.04	1.70	0.94	0.76
1969	7.63	0.95	– 0.68	1.63
1970	7.02	0.98	0.31	0.67
1971	5.58	1.24	–6.42	7.66
1972	5.54	1.47	—8.07	9.54
1973	9.34	2.45	—1.06	3.51
1974	11.37	3.50	1.09	2.41
1975	10.18	4.36	—13.84	18.20
1976	11.12	6.13	—15.87	22.00

US interest rate, while a positive entry for the change in the exchange rate indicates that the foreign currency appreciated relative to the dollar. The result of netting interest agio for each period and the percentage change in the exchange rate is shown in column 4; if the Fisher effect were literally true, the interset agio and the revaluation agio would fully offset each other, so that the value of the net difference would be approximately zero.

Observed differences between interest agio and the change in exchange rate may reflect that investors have currency preferences and demand a premium for bearing exchange risk.

It can be noted from the table that the magnitude of the net differences is high during the post-Smithsonian period in case of all the member states of the Community. This declining trend in capital market integration can further be noted by taking the correlation matrix of interest rates[12] of the member states of the Community to see whether they have been converging or not. Table II through IV list the correlation co-efficients matrix of interest rates for three periods, i.e., 1958-68; 1968-76 and 1958-76. High correlation of interest rates during the transitional period are presenting a strong evidence of a high degree of financial market integration. The convergence of interest rates can also be observed over the period of 1958-76. But the post-Smithsonian developments affected the results for the period 1968-76. Like Fisher's tests results, the correlation matrix table for the period 1968-76 shows lack of capital market integration.

The correlation matrix Tables V to VII, based on call money rates, further made it clear that up to transitional period, the member states of the Community were having more convergence in call money rates than in any other period.

From the above analysis, it can be observed that member states of the European Economic Community do not show a strong and persistent trend to greater degree of financial market integration particularly after the Smithsonian period, suggesting that domestic authorities do have some control over monetary conditions of their respective economies.

It can also be observed that the exis-

(Over to page 33)

TABLE II

Correlation Matrix for Changes in Interest Rates : 1958-68

	Belgium/ Luxembourg	Denmark	France	West Germany	Ireland	Italy	Netherlands	United Kingdom
Belgium/ Luxembourg	1.000							
Denmark	0.896	1.000						
France	0.944	0.876	1.000					
West Germany	0.886	0.962	0.775	1.000				
Ireland	0.912	0.970	0.956	0.879	1.000			
Italy	0.870	0.917	0.719	0.991	0.816	1.000		
Netherlands	0.977	0.782	0.921	0.776	0.827	0.770	1.000	
United Kingdom	0.992	0.813	0.993	0.702	0.916	0.645	0.922	1.000

TABLE III

Correlation Matrix for Changes in Interest Rates : 1968-76

	Belgium/ Luxembourg	Denmark	France	West Germany	Ireland	Italy	Netherlands	United Kingdom
Belgium/ Luxembourg	1.000							
Denmark	0.912	1.000						
France	0.867	0.988	1.000					
West Germany	0.235	0.566	0.658	1.000				
Ireland	0.081	0.939	0.910	0.345	1.000			
Italy	0.921	0.710	0.634	—0.150	0.566	1.000		
Netherlands	0.830	0.965	0.978	0.722	0.861	0.566	1.000	
United Kingdom	0.960	0.955	0.938	0.410	0.994	0.827	0.881	1.000

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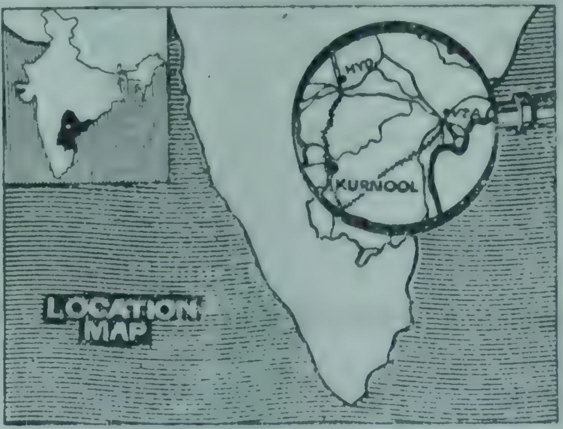

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Digester System	Vijay Tahks & Vessels
Pulp Mill	Dorr - Oliver, Utmal, KMW
Evaporators, Hypochlorite Loads Preparation, Centri-Cleaners	Tungabhadra Machinery & Tools Private Ltd.
Stock Preparation	Utmal
Paper Machine	Jessops
Paper Machine Accessories	Debikay, S.F. India, Sonar Areotech, S.L.M. Manaklal.
Finishing equipment	Jagenberg, Strechan Henshaw.
Recovery Boiler	BHEL, Trichy.
New Coal fired boiler	ISGEC Johnthompson.
Causticzers	Dorr - Oliver, India.
Electricals	NGEF, Siemens, ETC, English Electric, Controls & Schematics, Debikay Kirloskar.
Water	Geomiller.
Boiler Water & Colony Water Treatment	Aquatreat & Power Fabs.
Effluent	Geomille , Batiliboi + HGE.
Instruments	Taylors (India)
Pumps	Kirloskar Brothers, Mather & Platt, Gita Veekay.
Compressors	Kirloskar Pneumatics.
Conveyors	Wester Works, Konel Corporation.
Cranes	Khandelwal Udyog.
Tankages	Industrial Tanks & vessels.
Coal Handling & crushing	Voltas, Power Fabs.

MAJOR CONTRACTORS

Soil testing	Jawaharlal Technological University.
Civil Contractors	Pioneer Engg. Corporation, Head Wrightson, Rao Constructions, Geo Miller.
Boilers	Power Fabs.
Steam Pipelines and Recovery Boiler	Vijay Engineering.
Paper Machine	Dalal Engineering.
Electrical	Macnaill & Magor, Best & Crompton.

CONSULTANTS

Process and services	Bhargava Consultants Pvt. Ltd., New Delhi.
Civil Engineering	Aswatha Narayana and Eswara Bhargava Consultants.
Project monitoring and Job evalution	Andhra Pradesh Productivity Council.

IMPORTANT EVENTS

1974

6.4.74	LETTER of Intent to APIDC
20.8.74	Incorporation of the Company Sree Rayalaseema Paper Mills Ltd.
18.9.74	First Board Meeting under the Chairmanship of Sri M. V. Ratnam I.A.S.
30.12.74	Laying of foundation stone by Sri Jalagam Vengala Rao the then Chief Minister, Andhra Pradesh.

1975

21.2.75	Signing of Joint Venture Agreement between APIDC and TGL group. Signing of agreement for process consultancy with M/s Bhargawa consulting and design Engineers (Bhargawa consultants Private Ltd.) New Delhi. Submission of loan application to the Central Financing Institutions.
5.8.75	Recruitment of Project Manager Sri A. Pandu Ranga
11.9.75	Industrial licence obtained.

1976

10.2.76	Visit to site by Central Financing Institutions for project appraisal.
30.5.76	Signing of contract with M/s Jessop & Company, Calcutta for the supply of Paper Machine.
26.6.76	Issue of letter of intent by Industrial Development Bank of India (IDBI)

1977

15.4.77	Signing of services consultancy agreement with M/s Bhargawa Consultants (P) Ltd. New Delhi.
12.8.77	Commencement of Civil Works for Paper Machine.

1978

17.2.78	Opening of public issue.
11.8.78	First Term-Loan granted.
29.10.78	Lighting of 1st Coal Fired Boiler.
1.12.78	Commissioning of 132 KV Sub-station.
21.12.78	Commissioning of Water System.

1979

8.1.79	Commissioning of Chipping Systems by Sri Saifulla Baig, Chairman, Rayalaseema Development Board.
21.2.79	Commissioning of Pulpmill for unbleached pulp.
24.2.79	Commissioning of Recovery Boiler.
26.3.79	Commissioning of Trial production of Paper
21.5.79	Commissioning of the Bleach Plant.
1.7.79	Inauguration of Commercial Production.

MEANS OF FINANCE

PROJECT COST:

		Rs. in lakhs
i.	Land & Site development	47.32
ii.	Buildings	324.66
iii.	Plant & Machinery	2463.78
iv.	Technical Know-how	50.00
v.	Miscellaneous fixed Assets	723.39
vi.	Preliminary & Capital issue expenses	21.29
vii.	Pre-operative expenses	750.73
viii.	Margin for working capital	160.00
		4541.17

MEANS OF FINANCE

i.	Share Capital;		
	Equity: Promoters	313	
	Co-promoters	302	
		615	
	Public	300	
		915	
	Preference	90	1005
ii.	Term loans from Central Financial Institutions		
	IDBI (including central subsidy of Rs. 15 lakhs)	980	
	LIC	325	
	ICICI	315	
	UTI	40	
	IFCI	265	
	GIC & Subsidiaries	25	1950
			1045
iii.	Loans from Commercial Banks		
iv.	Interest free sales tax loan from Govt. of Andhra Pradesh		100
v.	Additional loan from ICICI in foreign currency		65
vi.	Additional loans from central Financial Institutions		174
vii.	Loans/deposits to be arranged by promoters		45
viii.	Deferment of interest accruing upto 30.6.79		157
			4541

PROJECT PROFILE

Location	*Vasanthanagar, near Kurnool A.P.*
Capacity	*42,000 tonnes of paper per annum, writing and printing paper with bamboo and hardwood on equal basis by Kraft process*
Promoters	*A.P. Industrial Development Corporation & T.G.L. Group, Adoni*
Industrial Licence	*11-09-1975*
Land	*230 Ha*
Raw Materials	*55,000 tonnes AD bamboo 60,000 tonnes BD debarked wood*
Water	*55,000 M^3/day from Thungabhadra River*
Fuel	*Primarily from Singarani colleries*
Power	*12,000 KVA at 132 KA*
Project Cost	*Rs. 45.41 crores*
Investment Annual Tonne	*Rs. 10,812/-*
Employment	*1500 direct & 5000 indirect*

THE CREDIT IS THEIRS

• *Industrial Development Bank of India* • *Life Insurance Corporation of India* • *Industrial Credit and Investment Corporation of India Ltd.* • *Industrial Finance Corporation of India* • *Unit Trust of India* • *General Insurance Corporation of India* • *New India Assurance Company* • *National Insurance Company* • *United India Assurance Company* • *Oriental Fire amd General Company* • *State Bank of India* • *Syndicate Bank* • *Union Bank of India* • *The Andhra Bank Ltd* • *Allahabad Bank* • *Canara Bank* • *Indian Bank* • *Bank of India* • *Bank of Baroda* • *Dena Bank* • *United Commercial Bank* • *Corporation Bank Ltd.* • *The Vysya Bank Ltd.*

MaaH-SRPM. 45/79

TABLE IV

Correlation Matrix for Changes in Interest Rates : 1958-76

	Belgium/ Luxembourg	Denmark	France	West Germany	Ireland	Italy	Netherlands	United Kingdom
Belgium/ Luxembourg	1.000							
Denmark	0.784	1.000						
France	0.668	0.498	1.000					
West Germany	0.700	0.623	0.470	1.000				
Ireland	0.920	0.907	0.608	0.601	1.000			
Italy	0.774	0.672	0.779	0.653	0.757	1.000		
Netherlands	0.750	0.871	0.655	0.781	0.813	0.862	1.000	
United Kingdom	0.829	0.933	0.419	0.520	0.952	0.614	0.756	1.000

TABLE V

Correlation Matrix for Changes in Call Money Market Rates

	Belgium/ Luxembourg	France	West Germany	Netherlands	United Kingdom
Belgium/ Luxembourg	(1.000)**				
France	(0.910)**	(1.000)**			
West Germany	(0.786)**	(0.460)**	(1.000)**		
Netherlands	(0.936)**	(0.993)**	(0.530)**	(1.000)**	
United Kingdom	(0.983)**	(0.978)**	(0.902)**	(0.964)**	(1.000)**

**For period 1958-1968

TABLE VI

Correlation Matrix for Changes in Call Money Market Rates

	Belgium/ Luxembourg	France	West Germany	Netherlands	United Kingdom
Belgium/ Luxembourg	(1.000)***				
France	—(0.873)***	(1.000)***			
West Germany	(0.234)***	(0.583)***	(1.000)***		
Netherlands	(0.920)***	—(0.905)***	(0.553)***	(1.000)***	
United Kingdom	(0.969)***	(0.985)***	(0.915)***	(0.959)***	(1.000)***

***For perod 1968-76.

tence of capital mobility has, in and of itself also to influence velocity, at least as related to the monetary aggregates. Capital mobility may be viewed as increasing the ease with which funds may be borrowed. This in turn may be expected to reduce the owned balances—in other words, to increase velocity. But to argue that by borrowing from the Community capital market, the problem of trade-off between inflation and unemployment can be solved is ridiculous in view of the fact that the problem is not of financing but of adjustment. Moreover in view of the absence of large stock of internationally acceptable financial assets, this technique can be employed only for a short run as a stop-gap measure.

In addition the factor mobility arguments have been put forward as part of a static approach. The movement of factors from one country to another takes time. Although it is convenient to assume *ceteris paribus* but in practice other things do not remain constant. Industrial organisation and technology are continually subject to change. By the time factors have changed location it may be necessary for the flow to occur in the reverse direction to counteract disequalibriating forces.

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3. Balassa, Bela, 'Towards a Theory of Economic Integration'; *Kyklos*, Vol. XIV, Basle, 1961, p. 1.

4. Myrdal, Gunnar, '*An International Economy, Problems and Prospects*', (New York, 1956), p. 11.

5. See Sayers, R.S, (ed.) '*Banking in Western Europe*' (Oxford : The Clarendon Press, 1962) ; and see also Kindleberger, Charles P., 'The formation of financial centres : A study in comparative economic history', *Princeton Studies in International Finance*, No. 36 (Princeton University), 1974.

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7. See P.B. Kenen, 'Capital mobility and financial integration : A survey' in *Princeton Studies in International Finance*, No. 39, Princeton University 1976 p. 31.

8. "Financial integration is desirable not only because of its effect on resource allocation but because it improves the efficiency of the balance-of-payments adjustment mechanism." See James Ingram's, 'Regional Payments Mechanism' in *Quarterly Journal of Economics*, Vol. LXXIII, Cambridge, Mass. 1959, p. 619.

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10. Marshall Hall and Dhiru Tanna, "On Exchange-Rate Unification: A Comment', *Economic Journal* 82 (December, 1972) : 1378. Corden also argues (*Monetary Integration*. Essays in International Finance, Princeton Studies, No. 93 April 1972, p. 29) that an attempt to maintain fixed rates without absolute assurance that they can be maintained is an invitation to increased destabilizing capital movements".

11. See Irving Fisher, *The Theory of Interest*, New York, Macmillan, 1930, p. 403.

12 Similar approach has been used by Robert G. Hawkins in 'Intra-E.E.C capital movements and domestic financial markets', in F. Machlup, W. S. Salant, and L. Tarshis, eds. in *International Mobility and Movement of Capital* (New York: Columbia University Press, 1972), Pp. 51-77, and also by Logue, Dennis E., Salant, Michael A. and Sweeny, Richard James 'International Integration of Financial Markets: Survey, synthesis, and results' in Carl H. Stem, John H. Makin, and Dennis E. Logue (ed.) '*Eurocurrencies and the international monetery system*, (American Enterprise Institute for Public Policy Research, Washington), 1976, Pp. 91-137.

TABLE VII

Correlation Matrix for Changes in Call Money Market Rates

	Belgium/ Luxembourg	France	West Germany	Netherlands	United Kingdom
Belgium/ Luxembourg	1.000*				
France	—0.032*	1.000*			
West Germany	0.412*	—0.153*	1.000*		
Netherlands	0.745*	0.371*	0.086*	1.000*	
United Kingdom	0.987*	0.982*	0.915*	0.958*	1.000*

*For period 1958-76.

Century's
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Complexities of rural economy

Anatomy of a Peasant Economy: Yujiro Hoyami; The International Rice Research Institute, Philippines; Pp 149; Price not given.

Economic History of Colonialism: A Study of British Salt Policy in Orissa: Sadananda Choudhury; Inter-India Publications, Delhi; Pp 229; Price Rs 60.

Agricultural Finance in Nepal: Kumar Kant Jha; Heritage Publishers, New Delhi; Pp 241; Price Rs 50.

Nationalised Banking & Economic Development: Gangadhar Khan; Vora & Co. Publishers Pvt Ltd, Bombay; Pp 253; Price Rs 35.

Towns—A Structural Analysis: K. Prabha; Inter-India Publications, Delhi; Pp 214; Price Rs 60.

Principles of Population Studies: Dr (Mrs) Asha A. Bhende & Mrs Tara Kanitkar; Himalaya Publishing House, Bombay; Pp 578; Price Rs 35.

Reviewed by **Academicus**

THE VITAL role of the rural sector in the economic development process is gaining increasing recognition. But unfortunately knowledge of the peasant economy that encompasses the majority of mankind is grossly insufficient for effective design of rural development programmes. Though numerous attempts have been made to develop a theory of peasant economy, no economic model has yet been created to incorporate the role of the village in the peasant economy.

Anatomy of a Peasant Economy aims at accounting in quantitative terms, the whole comlexity of the peasant economy. This was done through an intensive case study of a typical rice village in the Philippines. To understand the peasant economy, the author along with his colleagues has made an attempt to collect data simultaneously on production, consumption, investment, and transaction activities, as also of flow of goods and services in various activities both within households and within villages. It is rightly felt that collection of such basic data can alone serve as the basis for effective design of rural development programme, and national development policy. The study therefore has made an attempt to evaluate the effects of a programme of a new rice technology on farm output, costs and returns and impact on rural welfare through income distribution and consumption and on national development through capital formation both at household and village levels.

The details of the model are worth noting for students of village economy. The 'current rice production account' identifies the total value of rice output and the total cost paid (or imputed or both) to the inputs applied to rice production. The 'current non-rice production account' establishes the same identity with respect to other crops, livestock and poultry. Since village households not only engage in farming but also run a wide spectrum of non-agricultural enterprises, including commerce, transportation and manufacturing, the 'current non-agricultural production account' makes an attempt to establish the revenue-expenditure identified with respect to non-farm production activities. Values produced by the factors owned by the rural households, together with earnings of wages from outside employment represent major sources of the household income. The 'income-expenditure account' records how the income thus generated was allocated to consumption and savings.

BOOKS BRIEFLY

In addition to current production activities, the village households produce capital goods, such as houses and wells. The 'fixed capital production account' shows how much of the increase in the value of fixed capital is attributable to family-owned factors and how much of it was paid by external factors contributed from outside. The 'capital finance account' identifies the sources of fund for financing the investments including fixed capital formation and investments in inventories and financial assets. The 'transaction account' puts together all household transactions with others within the village and those outside the village. Private economic accounts for individual house-holds in the village are aggregated into social accounts of the village economy after deducting transactions within the village from private accounts. This model thus completes documenting the peasant economy in terms of private account of individual households and social accounts of the village.

intensive study

This intensive case study of a rice village in Philippines in quantitative terms also contains a description of the environmental and socio-economic characteristics of the selected village. The complex of peasants' economic activities is accounted for in terms of labour flows, income flows and corresponding changes in asset positions of village households. The village economy as a whole is analysed in terms of village social accounts. By putting together the findings of the study of an overall structure and working of the village economy, the study has made an attempt to draw some important policy-implications for rural development.

The study has observed that in the selected village, of the total village output, five per cent was consumed in the production process as seed and feed; 16 per cent was paid to the outside economy for purchase of current inputs such as fertilisers; and 21 per cent went to landlords living outside the village. This means 58 per cent was the earnings of factors owned by the villagers which remained and circulated in the village itself.

The study observed that as much as 30 per cent of total village output went to labour; and of that more than half was paid to hired workers within the village economy. Wage receipts by farmers represented as much as 90 per cent of family factor income; another 10 per cent was earned from their backyard enterprises such as duck and hog-raising. Incomes earned from employment of villagers' labour and capital in the economy outside the village were less than four per cent of the total village income, most of which went to large farmer households. The study also observed considerable income differentials among large, medium, small farmers and landless agricultural workers. It was also observed that 54 per cent of the total income was available for new addition to capital stock; but of that nearly 46 per cent flowed out of the village, primarily as repayments of past debts.

the implication

As regards policy-implications, it was observed that most of the income of villagers was generated within the village itself, only about four per cent coming from non-village employment. This implies that scope for villagers outside of village was severely limited, especially for those with limited education and skills. This would mean that "increases in the income of villagers are possible only through the increases in output from the production activities within the village." Since land is limited and there is increasing pressure of population on land, emphasis will have to be shifted to non-land based enterprises in villages such as duck and hog-raising, dairying etc. Barring the possibility of land redistribution from large tenants to the landless workers, and in view of the difficulties of finding employment in urban areas, "the only way to raise income levels of landless people should be to increase employment within the village." This is possible by creating irrigation works which would help double or multiple-cropping providing additional employment opportunities. Large potential exists for building such agricultural capital works by mobilising labour that remains idle during off-season. But the study has warned that there is a limit to all this, land being limited, and therefore simultaneously great efforts will have to be made to overcome population pressure on land.

Though conditions in the Philippines are different, from those in our countries there appears to be a great amount of similarity among problems faced by villages in Asian countries. This study therefore is of great relevance to India. The reviewer has not come across any such vallage study attempting to trace the origin, circulation and distribution of income in village and the level of capital formation We have had many macro-level studies. What is now needed, if we are serious about bringing about rehabilitation and development of village economy, is such micro-level studies at the village level on which alone policies can be formulated to solve peculiar problems of each village. This is the great lacuna left in Indian economic research and this study provides an ideal model indicating how scholars can get going with this type of reseach projects. This type of investigative study of village economy and income flows there can be made a part of syllabus for graduate and post-graduate students of economics in Indian universities.

BRITISH COLONIALISM

Economic History of Colonialism—A Study of British Salt Policy in Orissa is a historical work which deals exclusively with salt, its manufacture, monopoly, trade, administration and agitation against the British policy. The author has given a detailed account of the steady and systematic destruction of the once flourishing indigenous salt industry in Orissa by a ruthless alien government. The author has shown how eventually violation of salt law became the symbol of Indian people's craving for national independence and liberation.

Salt was a staple product of Orissa where it was produced extensively along the sea-board of the province. In the past salt contributed substantially to the prosperity of Orissa.

During the pre-British period, the Maratha rulers of Orissa exercised only nominal control over the salt affairs with a trifling transit duty on the movement of salt. The coastal zamindars of Orissa were allowed to exercise virtual control over the manufacture and sale of salt.

The conquest of Orissa in 1803 by the British changed the position entirely. In 1804 the salt business of the province—first of sale and then of manufacture—came to be made the government monopoly. Naturally commercial interests guided the British policy. The British government acquired by means of salt settlement salt lands from coastal zamindars giving them due compensation. By 1814 the entire province of Orissa was brought under the salt monopoly of the East India Company.

The salt administration by the East India Company proved in the beginning incompatible with traditional practices of manufacture and sale of salt. As a result salt became scarce and price of salt went up from 4 annas to Rs two per maund. The enforcement of the salt law was also very harsh leading to convinction and imprisonment of thousands of persons for minor infraction of salt laws.

The simmering discontent swelled and burst finally into the Khurds Rebellion of 1817. But the rebellion was soon put down and the government along with that took some remedial measures in the form of wider provision for retail sale of salt in the province. It should be noted that with all the evils associated with salt monopoly of the government, the salt industry provided employment to thousands of people in this poverty-stricken provinces.

helping Lancashire

When the system of salt monopoly by the government came to be firmly entrenched in Orissa, there was severe criticism of the system in the British parliament both on ideological ground of *laissez faire* doctrine and for providing in Bengal and Orissa increasing scope for Lancashire salt industry. The salt monopoly came to be abolished and instead the government imposed heavy excise duty on the manufacture of salt in 1864.

Manufacture of salt in Orissa which had suffered appreciable decline following the abolition of salt monopoly, now faced complete effacement under the excise system. With this development the workers engaged in salt-manufacturing faced utter ruin and were forced to migrate to adjoining provinces in search of jobs and bread.

The people in Orissa had been expressing their opposition to salt laws from the beginning. The opposition assumed organised approach under the political organisations such as the Utkal Sabha and the Utkal Union Conference. The plight of salt manufacturers and workers found its echo even in the British parliament. The suppressed feelings of anger against the oppressive salt policy of the government was struggling to find vent for an open confrontation with the British government. This opportunity came in 1930 when Mahatma Gandhi commenced his Salt-Satyagraha. The author has drawn the conclusion that "it can be stated that the British salt policy in Orissa and India in general had appreciably influenced the fate of the British rule in this country."

a lucid account

Sadananda Choudhury has given in this extremely readable book a lucid account of the development, decay and finally disappearance of the salt industry in Orissa, seriously affecting the economy both of the coastal region and eventually the whole of the province. We get here an account of how the colonial policy used to operate in the 19th century and how it was always clothed under some ideological garb. It also shows the utter helplessness of indigenous manufacturers in the face of political subjugation of the country by the British.

The book is of some special significance to Indian scholars. As a critic has pointed out, while there are a number of books on economic history of India at the macro-level, hardly any work is done to trace and analyse economic developments of the past at the lower level, in spite of the fact that abundant material in this regard is lying in the past records and documents. Since each state and even district has its own peculiar problems created among other things due to historical developments, this study should serve as a good model for writing of economic histories at the micro-level. It would be of significance both from the theoretical and practical points of view, apart from making interesting reading especially for people residing in particular regions.

NEPALESE ECONOMY

Economic literature on Nepal is rather scarce and therefore *Agricultural Finance In Nepal* by K.K. Jha analysing the various aspects of this problem in that country is welcome.

Agricultural sector occupies the central position in this landlocked and mountainous country. But in spite of two decades of planning (which commenced in September 1956), the basic weaknesses in the agricultural sector persist. Small size and fragmentation of holdings, large number of share-croppers, high rents, non-availability of irrigation and other facilities, low levels of output due to prevalence of inefficient and primitive methods of cultivation, heavy and growing pressure of population on land, all result in low level of income of farmers who constitute the majority of population in the country.

Naturally it was observed that nearly 60 per cent of the farmers were almost regular borrowers; and what is most unfortunate, more than 50 per cent of borrowings were spent on household consumption. This means very little of borrowings is being spent on improvement of productive resources of agriculturists.

Money-lenders seem to dominate the scene as in India, lending money on personal security and charging high rates of interest ranging from 30 to 50 per cent. Indian money-lenders operate in border areas lending money only to trustworthy Nepalese agriculturist clients. As in India, money-lenders in Nepal are agriculturists-cum-traders with complete hold on the farming community. Debt legislation restraining unscrupulous activities of money-lenders has been passed; but this has hardly produced any favourable impact on the prevailing situation.

As a remedial measure the government took the initiative in starting the cooperative movement to establish an institutional base for providing agricultural credit. Gradually single-purpose societies came to be converted into multi-purpose societies. But the cooperative movement in Nepal seems to have come to be associated with all the evils that go with the movement in India—inadequate finance, thoroughly inefficient management, complicated procedures and large overdues. The consequence is that during the fourth Plan period (1970-75), it was observed that "out of the 1,300 existing societies, about two-thirds of the 1,100 concerned with agriculture are ineffective and are in the process of liquidation." Of the rest, some need promotional measures whereas others needs to be amalgamated. In brief, cooperative institutions have become a sort of channel to divert funds meant for the agricultural sector.

novel scheme

A novel scheme that attracts attention of readers is the compulsory savings scheme that was launched vigorously in 1964 as a measure to increase financial resources of cooperative societies. Savings both in money or kind were to be mobilised compulsorily in villages at stipulated rates which varied according to the size of landholdings. What is more important, the savings were to be mostly invested in the areas from where they are collected. A network of village committees came to be established for the purpose. The whole idea behind the scheme was that since agriculture was the major sector of the economy, surplus for investment must be provided by that sector only. The idea is sound and may be attempted in certain parts of India undergoing green revolution. The initial response was quite favourable; but with annual agricultural growth rate in Nepal of only about 0.2 per cent between 1952 and 1969 (as compared to 2.9 per cent for 75 developing countries), and population increasing at two per cent per year, collections from compulsory savings began raising a storm of protests with the consequence that the collection was suspended in April 1969 due mainly to agricultural unrest. A good experiment thus came to a premature end.

From the reading of the book certain aspects attract our attention. Though the author is primarily concerned with the problems of agricultural finance, he has given a fairly comprehensive, detailed and tabulated information about the economy of Nepal as a whole. This helps put agriculture in Nepal in its proper perspective. Secondly, the reader comes to realise how the Indian institutions and practices have left their deep impact on Nepal. Third, as one proceeds, one realises that the problems of agricultural finance and of development cannot be and must not be tackled in isolation. Such an attempt is bound to be frustrated. This implies that problems of agricultural development and of finance must be viewed as part of general economic development of the country as a whole and they should be appropriately integrated with other developmental aspects. Finally, one also realises that due to the mountainous nature of the country and scarcity of resources, there appear to be clear limits to economic development of Nepal. This implies that for years to come the country will have to take assistance from other countries and international developmental institutions.

The author deserves compliments for writing this instructive treatise by collecting first hand information.

NATIONALISED BANKING

Gangadhar Khan, the author of *Nationalised Banking & Economic Development* has made an attempt "to evaluate the role of commercial banks in the planned process of economic development of this country."

The need for short-term and long-term loans increases when the process of economic development is under way. This implies that a sound banking system is the *sine qua non* of accelerated economic development. In India one reason for capital shortage is inadequate resource mobilisation. This further enhances the need for spread and the increasing role of banking especially in unbanked and underbanked areas of the country. The author has emphasised that unlike in the past there will have to be "a major modification of the role of commercial banks with a positive accent on promotional and developmental activities. Specifically commercial banks' policies and practices will have to be directed to serve the basic social and economic objectives, namely prevention of any monopolistic trends or concentration of economic power and misdirection of resources. This means the commercial banking sector will have to positively respond to the demands of a dynamic economy both through structural and functional adaptation.

The author has traced the development of commercial banking in India since the days of its inception to the present day, concentrating his attention mainly on developments since the nationalisation of commercial banking in India in July 1969. He has drawn particular attention to the problems which commercial bank branches in rural areas are facing in respect of providing finance to the agricultural sector.

the recommendations

In the light of his analysis, the author has made a number of recommendations. He wants that there should be increasing flow of credit into hitherto neglected sectors; the new type of borrowers in the rural areas should be treated differently from traditional borrowers who are in a position to offer generally acceptable securities against loans; there should be simplification of forms and procedures; there should be decentralisation of authority in the banking sphere so that rural clients get timely and adequate credit; there should be arrangements for providing large loans through a consortium of banks; there should be provision for supervision of end-use of loans to agriculturists; loans should be provided as far as possible in kind; and there should be adequate training facilities for personnel in rural branches to enable them to understand problems of agriculture and rural industries.

The author has made a novel suggestion. He is of the opinion that there is a general misconception that the principle of marketing is relevant only to manufacturing firms. He strongly holds the view that the marketing "concept can be successfully adopted by banks. It requires a systematic study of customer needs and wants, leading to overall philosophy that the customers should be provided with the type of service they need." The whole issue should centre round not profit-maximisation, but customer satisfation. Banking should look upon itself as a service industry and with due involvement of the banking personnel should build a favourable public image by catering for their varied needs in an efficient manner.

While nationalised commercial banks have no doubt been playing increasingly dynamic role in the economic development of the country, the author has failed to point out certain serious defects or trends which are emerging that might hamper instead of helping economic development of the country. For example, there has been indiscriminate and unplanned opening of branches in rural areas, with staff not properly acquainted with agricultural economics and rural problems. There is a multiplicity of agencies consisting of commercial bank branches, lead banks and commercial bank-sponsored regional rural banks with neither geographical nor functional specialisation. Their presence in rural areas has led to diversion of much needed urban funds to rural areas on the one hand, and adverse effects on cooperative banks on the other. This has given the cooperative movement considerable setback which is unfortunate as cooperative banks alone have a country-wide network and direct and personal contacts with individual farmers.

over-financing the rich

The multi-agency approach spearheaded by commercial banks in rural areas has resulted in overfinancing of richer sections of the farming community and under-financing of small and marginal farmers and poor rural artisans. What makes one most apprehensive is that as in the case of cooperative banks, the overdues in respect of commercial banks in rural areas amount to 50 to 60 per cent ! While adequate banking funds should be made available to the rural sector, this should not be at the cost of the dynamic urban sector which always spearheads economic development. From the developments in the commercial banking sphere which are taking place since 1969, there appears to be hardly any systematic planning behind what is being done. As in other spheres, it is ad hocism that appears to be the rule rather than exception. If this continues commercial banking in India may not be in a position to play its due role in the economic development of the country. The author has failed to draw attention to these trends developing since the nationalisation of commercial banks in the country.

PUNJAB TOWNS

The study of urbanisation has assumed increasing importance all over the world and particularly in developing countries which on account of their programmes of industrialisation are experiencing urbanisation at a fast rate.

Towns—A Structural Analysis is confined to the state of Punjab. The state has undergone major boundary changes both at the national and international levels. Punjab is also fairly urbanised, ranking sixth in terms of 1971 census. Every fourth person in Punjab lives in the urban sector. Naturally this study analysing causes of urbanisation and interaction between urbanisation and socio-economic aspects of the structure of towns which have been analysed in detail would provide sound basis for fruitful planning policies in future.

With town as a unit of analysis, the author has analysed multi-dimensional character of its structure with due emphasis on demographic, occupational, industrial and functional aspects of towns in Punjab. Further, the analysis of the town's structure is completed through the study of inter-connection between the towns resulting from variations in size, functional structure and nature of towns, The analysis of towns has been finally integrated through the identification of urban hierarchy which is the end result of interaction of different structural elements.

According to the author, the demographic characteristics of Punjab towns are determined by the size of towns, administrative or non-administrative status of towns, predominance of primary, secondary or tertiary activities and location of towns. The author found that these determinants together have resulted in wide variations in population characteristics of age and sex composition, density, growth, literacy pattern and so on.

Cities of Punjab are characterised by younger working force with significant sex differentials. Interestingly, it is observed that although the large proportion of people live in big cities, this has not resulted in high densities of population. Higher densities have appeared as the characteristic feature of non-administrative centres than the result of size of towns. On the other hand, maximum fluctuations have been noticed among small and medium towns. Another interesting feature is that throughout ths state of Punjab, literacy rate is low. The cities have higher literacy rates but surprising they are marked with lesser percentage of employed people, giving rise to the problem of educated unemployment and hampering economic planning of cities.

Punjab towns have diversified character with people engaged in different types of activities. What is however of significance is that in a large majority of towns, primary or more specifically agricultural activity has appeared as basic which is rather unusual. Of course, there are modern towns like Nangal and Gobindgarh where only secondary activities have appeared as basic.

fillip to small industry

The nature of basic activities and the predominantly agrarian economy of Punjab are further emphasised through poor industrial concentration in the Punjab towns. Most of the industrial units in Puujab are small in size where less than 20 workers have been employed, the government offering to such industrial units a number of incentives such as exemption from property tax, concessions in electricity duty, cheap advances of loans and so on.

Another feature that distinguishes Punjab towns is that they are diversified in character and lack functional specialisation like administrative towns, transport nodes or specialised centres of industry.

On the basis of his analysis the author has made a number of recommendations. He has recommended that growth of agricultural towns should be encouraged by making various urban facilities available there. The author has also recommended that "To minimise regional disparity, it is essential on the part of the government to extend concessions and incentives to other places to encourage decentralisation of industries."

The predominance of younger generation in many towns suggests that in a decade or so they will enter labour market and affect employment position. The government should from now on give thought to it and take steps to provide increasing employment opportunities in decades to come.

The author is confident that with a little planned efforts on the part of government, new industrial towns can be developed (relieving the present pressures on three towns of Amritsar, Jullundur and Ludhiana), reducing regional disparities and avoiding many of the urban problems faced by cities in other states.

The analysis of towns in Punjab has many lessons for other states in India. Though Punjab is a land of vast plains and plentiful supply of water, it should be noted that it is also close to potential enemy border which fact neutralises some of the geographical advantages. Punjab is the one state where substantial urbanisation has taken place though there are hardly any large-scale industries. It is a state where without large-scale industries worth mentioning, the per capita income is the highest among all the states in India. It is the one state where problems of slum-dwellers and pollution have not made their presence. Punjab also has shown how agro-based industries can bring about new set-up of towns without heavy concentration of urban population as in Bombay, Calcutta and Kanpur. Punjab also has shown how suitable government policy can bring about establishment of new and flourishing towns.

POPULATION STUDY

In recent years study of population has been gaining importance because of the increasing realisation that "an understanding of the process underlying population changes, the factors associated with them and their consequences, is basic for any student of social and behavioural sciences." There is a number of excellent foreign publications on this subject; but somehow they are not in tune with prevailing conditions in India and therefore are not of much practical significance. A few Indian books which have been published do not cover all the aspects of the population problem, especially from the Indian point of view. It is therefore possible to concede the point made by the joint authors of *Principles of Population Studies* that "the present work is perhaps the only book on population studies which is mainly based on Indian data and meant for Indian students." There is no doubt that this book is easily one of the most comprehensive on the subject the reviewer has come across, dealing as it does with history, theory, problems and population policy in India against the background of world population trends and developments.

In this brief review only some significant aspects of the study can be referred to and commented upon. The authors, for example, have rightly stressed the point that "the study of population is multi-disciplinary in nature, involving an understanding of biology, genetics, mathematics, statistics, economics, sociology, cultural anthropology, politics, geography, medicine, public health, ecology, etc." This incidentally explains how on account of the incompetent personnel, without even the rudiments of some of the above subjects, engaged in evolving and executing it, the population policy proved to be ineffective in India.

United Nation concern

Most of the details regarding population given in this book lie scattered in various books on the subject and are common knowledge. They may therefore not be referred to. But the attention needs to be drawn to the fact that the UNO designated the year 1974 as the world population year and this was considered as a major development in the field of population. Three major lines of approach to the problem of population were finally approved by that world organisation. The first concerned the ethical, religious and spiritual values involved, emphasising the importance of the value of life and protection of family as a basic unit of society. It also rejected all forms of coercion, but accepted the propriety of not allowing certain methods of contraception which the Roman Catholic Church did not approve. The second line of thought emphasised that the root cause of population problem was the exploitation of developing countries by the developed countries. The African countries naturally suspected that "any measure at slowing down the rate of population growth was meant to be a substitute for socio-economic development rather than a way to achieve development." The Chinese on the other hand disapproved of the emphasis of the UNO draft p'an on demographic variables and underscored the need for a new international order.

government headache

It needs to be pointed out that bringing in religious considerations in matters of population policy of the government is likely to cause considerable amount of headache to the government of India and will prove to be an obstacle in the way of its effective implementation. The population problem must be tackled in India on purely secular and economic basis.

Some of the important features of the world population plan of action were as follows : (1) There is need for social and economic development as well as more equitable distribution of wealth; (2) though all nations regarded that the population growth rate is high, most nations did not regard it as a cause for alarm; (3) inter-relationship of population growth and socio-economic development was emphasised; (4) sovereignty of each nation to determine its own population policy without external interference was accepted; (5) surprisingly, family planning was not considered as an agent of change to speed up development process; it was supported more on grounds of basic human rights than on demographic grounds.

What is to be noted is that at the Bucharest conference, several representatives from developing countries maintained that "population control was not an alternative to development....nor was family planning a panacea for population problems....Population control is not considered the determinant of economic and social change and the easing of population pressures will mot automatically solve all economic and environmental problems." The tendency among developing countries appears to de-emphasise dangers of population growth and control while highlighting the need for rapid economic and social development.

no direct relationship

From the reading of the book, it becomes clear that it is not possible to establish direct relationship between the two important variables, namely population growth rate and rate of growth of the economy. For example, all possible combinations of rates of growth of population and per capita income can be observed in different countries at different stages of economic development. For example, in the USA and Japan, a high rate of population growth appears to go hand-in-hand with high rate of increase in per capita income; whereas in Sweden, a low rate of population growth with high rate of increase in per capita income is observed. In India and Italy, the position appears to be opposite; while in France both population growth and rate of increase in per capita income were low. In the same way we find combinations of relatively high proportion of saving and capital formation with high rates of growth of population (as in Japan), moderate proportion of capital formation and high rates of population growth (as in Sweden and the USA), and relatively low rate of capital formation with moderate rate of population growth (as in Britain during 1870 and 1914). The conclusion appears to be inescapable that no generalisation is possible regarding relationship between the growth rate of population and economic development and increase in per capita income

Economic development of backward countries is an extremely complex phenomenon wherein a large number of variables play their part acting and interacting on one another. To directly link the two variables, namely population growth and economic development and to make the latter entirely or even mainly dependent upon the former would be thoroughly misleading. This would also indirectly explain how on extremely naive basis India's population policy came to be evolved and implemented and why it failed to produce any worthwhile impact on the country's economic development and per capita income.

The authors have done a commendable job in bringing out this comprehensive volume on the subject of population helping readers to look at the problems of population in their proper perspective.

Books Received

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TRADE WINDS

Export Study Panel

THE PARLIAMENTARY consultative committee attached to the Commerce ministry was informed recently about the constitution of a 13-member panel to formulate a long-term export strategy for the eighties. The panel headed by Mr P. L. Tandon, Director General of the National Council of Applied Economic Research, has been asked to submit its report by June 30, 1980. Making the announcement at the recent meeting of the consultative commitee, the Commerce minister, Mr Mohan Dharia, said that study of the country's export prospects in the coming decade was needed in the context of current developments in the international economy.

The decision to set up such a committee was in fact, taken at the time of announcing export policy for the current financial year. The terms of reference of the committee include, besides drawing up a perspective plan for India's exports, identification of export markets. It will also suggest measures for creating an adequate production base and export surplus in both manfacturing and agriculture.

Assistance from West Germany

India will get a commodity loan of Rs 31.25 crores (DM 70 million) from the Federal Republic of Germany for the year 1979-80. An agreement to this effect was signed recently by Dr. Manmohan Singh, secretary, ministry of Finance, department of Economic Affairs and Dr. Dirk Oncken, Ambassador of the Federal Republic of Germany. The loan will be used for commodity imports like spare parts and accessories as also other semi-manufactures, fertilisers etc. This loan carries an interest of 0.75 per cent with a maturity of 50 years including a grace period of 10 years. The loan has a grant element of 83 per cent. This agreement for the commodity loan tranche for 1979-80, has been signed in advance of the inter-governmental negotiations between the two countries, scheduled to take place in October, 1979. This will ensure speedier utilisation of funds under this tranche.

Tariff Values for Dry Fruits

Customs duties on all articles imported into India are generally on *ad valorem* basis (on the C. I. F. value of the goods). In certain cases, however; government reserves the power to fix tariff values, which will be taken in preference to invoice values for charging *ad valorem* duties. In the case of dry fruits such as almonds, raisins and dates and certain others, government of India had fixed tariff values for the purpose of charging customs duty, particularly, when imported from Iran and Afghanistan. In line with the trend in the prices of these articles in the international market and representations made to the government, the existing tariff values have been reviewed and the revised tariff values have been fixed in respect of almonds, raisins and dates when imported from Iran and Afghanistan. The tariff values came into force with effect from June 27, 1979. Simultaneously, tariff values in respect of other dry fruits/fresh fruits have been abolished.

Participation Certificates Scheme

While considering the various suggestion made by the working group on Participation Certificates (PCs) and call money market, the Reserve Bank has decided, to begin with, to initiate measures to discourage the commercial banks from excessive recourse to PCs, ensuring, however, at the same time that action in this regard does not (i) lead to a large-scale dislocation in the operations of banks, and (ii) make it difficult for other financial institutions to shift to other monetary instruments for short-term investment. With this view, it is proposed to phase out the process of bringing the PCs under the Statutory Liquidity Ratio (SLR)/Cash Reserve Ratio (CRR) over a period in stages as indicated below:

(i) As on the last Friday of July and during the period thereafter, 50 per cent of the outstanding PCs will be subject to the SLR and six per cent CRR requirements. (ii) As on the last Friday of August 1979 and thereafter 75 per cent of the outstanding PCs will be subject to the SLR and six per cent CRR requirements. (iii) As on the last Friday of September 1979 and thereafter, 100 per cent of the outstanding PCs will be subject to the SLR and six per cent CRR requirements.

In addition to the foregoing, the scheduled commercial banks will have to maintain with the Reserve Bank an additional average daily balance equivalent to not less than 10 per cent of any increase in PCs over the outstanding level as on the last Friday of July 1979.

With effect from the last Friday of July 1979 and thereafter, the outstanding PCs issued by banks will cease to be treated as contingent liabilities; they will be treated as 'deposits'.

Customs Duty on Textile Machinery

The government has reduced customs duty on parts of vari pitch sheave stepless spindle speed regulator for textile machinery from 75 per cent *ad valorem* to 40 per cent *ad valorem*. Gazette notification in this behalf had been issued on June 27, 1979. This had been done to bring the rate of duty on component parts at par with the rate of duty on the main textile machinery.

Duty Exemption for Coking Coal

Coking coal with low ash content which is used in the steel plants is in short supply; imports are therefore being arranged to reinforce the supply. Considering the high CIF prices of the coking coal abroad and with a view to making the imported coking coal available to steel plants at reasonable prices, the government of India had fully exempted coking coal from the entire basic, auxiliary and additional duty of customs, upto June 30, 1979. Considering the need to continue import of coking coal for some more time, the customs duty exemption have been extended for one more year. Notification in this behalf was issued on June 27, 1979.

Urban Cooperative Banks

In the light of the recommendations made by the Committee on Urban Cooperative Banks and on a review of the operations of the RBI's directive (May 25, 1977) regulating secured and unsecured advances of primary cooperative banks, the Reserve Bank has effected the following relaxations in the directive with effect from July 1, 1979. The limit of total advances to a single party by banks with total time and demand liabilities of Rs 200 lakhs or more has been raised from Rs 10 lakhs to Rs 15 lakhs or five per cent of total time and demand liabilities, whichever is lower.

The limit of unsecured advances to a single party for purposes like trade, commerce, cottage and small-scale industries, housing and education has been enhanced from Rs 10,000 to Rs. 15,000 or five per cent of the total of time and demand liabilities, whichever is lower. The facility of adding 75 per cent of paid-up capital and reserves to the total of time and demand liabilities, which was available only to newly organised primary cooperative banks for the initial period of three years, has been extended to all primary cooperative banks.

Bad Debts

Over Rs 1,200 crores advanced by bank in the country today are termed as "bad debts or sick accounts"—with little hope of recovery. The banks call these as "sticking accounts"—accounts which won't leave the banks. Of this amount of Rs 1,200 crores, the share of large scale industrial units is Rs 1,000 crores, the balance of Rs 200 crores is with the small-scale units. Most of these accounts relate to the period immediately after the nationalisation of banks, when every bank tried to "show-off" its efficiency. In the case of Bank of India alone, "sticking accounts" account for Rs 112 crores.

Some states are considered good by the banks in the matter of recovery of farm sector loans. For instance, Bank of India, in 1978, had 85 per cent recovery in Punjab. It was 70 per cent in Haryana, 51 per cent in UP, 42 per cent in Madhya Pradesh but only 31 per cent in Bihar and 29 per cent in Maharashtra.

Exchange for Study Abroad

As an annual feature, Reserve Bank of India has decided to grant foreign exchange facilities to a limited number of students who wish to proceed to the United Kingdom to serve articleship with firms of chartered accountants with a view to appearing for the examinations conducted by the Institute of Chartered Accountants in the UK. To qualify for release, candidates should be graduates with good academic record and must have made arrangements with reputed firms of chartered accountants in the UK agreeing to accept them as articled clerks on a reasonable stipend not below £1,500 per annum. The standing of the UK firm offering articleship will be taken into account in considering the applications. Candidates who are required to pay premia/deposits on admission to articleship will not be considered.

Candidates whose applications are approved will be released exchange to the extent of the shortfall between Sterling Pounds=US $3,000 and the net remuneration received by them from the UK. The selected candidates, who are required to undergo a foundation course under the current rules of the UK institute, will also be released additional exchange for maintenance and tuition fees, on production of documentary evidence of their having obtained confirmed admission to the foundation course.

ADB Loan for Sri Lanka

The Asian Development Bank has approved a supplementary loan of $3 million from its special funds resources to the Urea Fertilizer Project at Sapugaskanda in Sri Lanka. The supplementary loan is in response to a request from the government of Sri Lanka to finance a portion of an additional $8 million in foreign exchange required to complete the project. The project, which originally received a $30 million concessional loan from the bank in 1975, will establish the first urea fertilizer manufacturing plant in Sri Lanka and will assist the country in attaining self-sufficiency in foodgrains and boosting its agro-based exports. Besides the bank loan of $30 million, assistance was also extended to the project in the form of concessional loans by Kreditanstalt fur Wiederaufbau (KfW), the Kuwait Fund for Arab Economic Development (KFAED) and the government of India, in 1975.

At the time of project appraisal in 1974, the total capital cost of project was estimated at $152.01 million, of which $92 million was the foreign exchange cost. The revised capital cost of the project is now $171.97 million, including a foreign exchange component of $110.66 million. The actual increase in the foreign exchange cost is estimated at $18.66 million. However, taking into consideration factor like changes in the US dollar values of currencies in which the original loans of co-lenders were denominated, and the government of Sri Lanka's contribution of $5.5 million from its foreign exchange reserves, the net shortfall in the foreign exchange requirement is $8 million. For various reasons, such as abnormal escalation in the world prices of plant, equipment and materials, the effect of currency fluctuations and delay in implementation, the project costs have increased.

India-Algeria Cooperation

India and Algeria recently initiated a technical and scientific cooperation agreement creating a framework to facilitate availability of expert manpower. Making reference to this agreement after his two-day visit to Algeria the External Affairs minister, Mr A. B. Vajpayee, stated that the agreement would be finalised after some details and formalities had been completed. "We have agreed that contacts in different sectors in the field of economic, industrial and social activities must be arranged in near future. Our trade can be further increased especially if we can reinforce it through an agreement on better shipping links. In the fields of heavy and light industry, pharmaceuticals, petrochemicals and new forms of energy, potential has been identified for beneficial interaction", Mr Vajpayee said. In the programme for expansion of railways, public health, vocational training, housing and construction there was a basis fo much greater links and coopetion between the two countries, he added.

Trans-Australia Airlines

Trans-Australia Airlines has announced the introduction of a new air fare called "See Australia" to encourage Asian visitors to travel within Australia. This was announced by Mr Len Lambourne, TAA's sales manager for south-east Asia who said that the 30 per cent reduction was conditional that the passenger had a return promotional fare air ticket and travels a minimum of 1000 kilometres within Australia. Mr Lambourne said that he had recently arrived in south east Asia and his initial observation was that most Asian visitors simply went to the main capital cities and did not venture out to see many of the very interesting attractions that Australia has to offer. As a result of this new fare Mr Lambourne said that he hoped more visitors will visit such places as the Barrier Reef, Central Australia and Tasmania.

Customs Duty on Soda Ash

Soda ash, an essential raw material in the glass and silicate industries, is in short supply. Imports are, therefore, being arranged to re-inforce the supply. Considering the high c.i.f. prices of soda ash abroad and with a view to making imported soda ash available to industries at reasonable prices, the government of India had exempted soda ash of dense and light varieties from basic customs duty in excess of five per cent *ad valorem* and 35 per cent *ad valorem* respectively and from the whole of auxiliary duty of customs up to June 30, 1979. Considering the need to continue import of soda ash for some more time, the customs duty exemption has been extended up to March 31, 1980. Notification in this behalf had been issued on June 29, 1979.

US Assistance

Two agreements totalling 68 million dollars (Rs 54.5 crores) in US aid for Indian development projects were signed on June 30, by Dr Manmohan Singh, secretary, ministry of Finance, and United States ambassador, Mr Robert F. Goheen. The major agreement is for a 58 million dollar (Rs 46.5 crores) loan to the government for accelerating the pace of electrification in India's least-developed rural areas. The loan will be utilised by the Rural Electrification Corporation to finance about 150 rural electrification schemes of the state electricity Boards in at least nine states. The plan calls for the provision of power primarily to operate pumps needed to tap groundwater for irrigating farms. In addition to increased food production and employment opportunities from irrigated agriculture, the plan seeks also to provide power to small rural industries and to village homes.

Both Ambassador Goheen and Dr Manmohan Singh drew attention to the United States' significant role in India's rural electrification programme. "India's rural electrification programme", Dr Singh said, "was born with active US involvement." Emphasising the key role rural electrification plays in the rapid modernisation of India's agricultural sector Dr Singh added that he was glad that "the US government has resumed development assistance to India." Ambassador Goheen said that these loans would mean "that Indian farmers will have more pumps to irrigate their fields."

The second agreement for 10 million dollars (Rs 8 crores) is an amendment to last year's 28 million dollar loan to finance the import of insecticides to control the resurgence of malaria. The loans to be provided by the US Agency for International Development (USAID), are for 40 years, with a 10 year grace period, and carry an interest rate of two per cent during the grace period, and three per cent thereafter.

Names in the News

Mr Douglas Macleod Marchant has taken over as managing director of Bata India Limited.

Mr A.K. Banerjee has taken over the charge in Britannia Engineering Company Limited as chairman and chief executive.

Readers' Roundtable

Iron ore for Indonesia

Sir, I have the pleasure of thanking you for the write-up on Indonesia entitled "Indonesia; a market for iron ore?" in your June 15, 1979 issue.

In the context of the enhancing and ever-growing India-Indonesia economic relationship your article is quite timely and all praise is due to you for bringing to light Indonesia's potentiality in this regard.

I must offer also my great appreciation to W. Amarnath the writer of the piece especially for his eye for details and his thorough understanding of the subject-matter.

However, a few discrepancies have crept in to this article which I would like to record as follows:

"It has been stated in the article that " .... Krakatau Steel plant is under construction at Jalan, Gatot, Subroto Kav 54, Jakarta". (p. 1280, 1st column). I would mention that Krakatao Steel has got its plant at Cilegon about 40 miles from Jakarta and the aforementioned address is where its city-office is located.

In the article it is indicated that ".... an understanding has been reached between Indonesia and India according to which Indonesia would lend finances to India to build a pelletizing plant with two million tonnes per year capacity in the Bailadila range." (Pp. 1280-81, 3rd & 1st columns).

I would like to state that no offer had been made by Indonesia to finance the proposed project. The understanding is that India will on her own set up the pelletizing plant after due contract is entered into that Indonesia will be lifting pellets. But the Indian side has no objection if Indonesia is willing to join in the financing of the project which offer has been declined by the Indonesian side.

I feel compelled to point out these discrepancies to give the correct picture of this aspect of India-Indonesia economic cooperation to the reading public.

Yours etc
Tjokrowaspodo
Minister Counsellor (Ec)
New Delhi
June 23, 1979

Company Meeting: Hindustan Lever Limited.

A COMPANY OF PEOPLE

Speech delivered by
T. Thomas,
Chairman, at the Annual
General Meeting of
Hindustan Lever Limited,
held at Bombay on
Thursday, 28th June 1979.

I INTRODUCTION

The popular image of a company like ours is that of a manufacturing and marketing enterprise with a variety of products. But to those like me, who work in the company and are responsible for managing it, ours is a company of people. The biggest and most important element in a job like mine is to deal with people. Therefore, this year, I thought I would tell you something about the people who are involved with this company. They are people in all parts of our country, from all walks of life, with varying levels of consciousness about their involvement in the company.

II INVESTORS

On an occasion like this AGM, I cannot help but start with the people whom I am literally facing this afternoon—the investors in our company. We have over 82,000 shareholders and have thus, I believe, the distinction of having the largest number of shareholders of any company in India at present. Our last share issue was one of the largest on the Indian stock market and the magnitude of response to it was a gratifying measure of confidence which the investing public has in this company. That was when the number of shareholders increased from about 16,000 to over 90,000. I must confess that we had never anticipated such a large increase and it took us a while to learn to cope with this number! We would like to thank you for being patient with us. At one stage, there was an expectation that the number might drop significantly as shareholdings got consolidated, but it has remained at over 80,000.

Our shareholders are by no means rich people... 70% of them own only up to 50 shares each and 82% own only up to 100 shares each. They do take a keen interest in the company's affairs and we, as management, have responded by being as open and communicative as possible. Because of the numbers and geographical spread, most communications with investors have to be through the printed word. However, the AGM provides one occasion for a face-to-face dialogue with the shareholders. This is the 12th AGM that I am attending as a Director or Chairman of this company, and my impression over the years has been that it has been a dialogue rather than a formal meeting. We have always allowed adequate time for shareholders to raise their questions and have sincerely attempted to respond to them immediately. Of course, this has meant that the meetings have tended to take about three hours. But it has been a worthwhile tradition to be open and communicative. We have a lively and critical audience every year, but you have also been generous with your appreciation. And we, as a Board, have learnt a lot from these meetings.

What does a shareholder expect from this company? He expects a return on his investment which is better than what he would get from investments which did not involve risks—e.g. National Savings Certificates, fixed deposits, etc. Any investment in equity of a company carries with it a measure of risk. Therefore, the return has to be correspondingly higher than from a risk-free investment. However, the risks involved in different shares can vary considerably and the investor has to make his own assessment. So, one of the first expectations of an investor is reliable information about a company and its record of performance from which the degree of risk can be assessed.

The return from fixed deposits from good companies at present is about 12% per annum. Therefore, to induce an investor to buy shares instead, a company will have to offer upward of something like a 15% dividend, unless there are other major attractions.

The other major expectation of the shareholder is growth which is required to compensate for the continuous erosion of the value of money through inflation. With an average of 7% inflation per annum, unless the dividend income from the same investment at least doubles every ten years, the investor is losing the substance of his investment. This is generally achieved through the issue of bonus shares at intervals which adds to the base capital and thereby compensates for inflation to some extent. There is a common misconception that bonus shares are some kind of windfall gain which shareholders get every few years. The truth is that it is merely one of the methods of compensating for inflation. In this respect, it is not dissimilar to the periodic revision of wage scales of employees to ensure that the real standard of living of an employee is not seriously affected in the long run as a result of inflation. The shareholder is equally entitled as the employee to protection, at least to some extent, against inflation. In our country, where capital is in short supply, the need to provide inducement to save and invest makes it even more important to protect investors in shares against inflation.

Over the years, the shareholders—especially the well-informed urban groups—and institutional shareholders have become more discerning in their assessment of a company. They look beyond the dividend and growth record and try to judge the quality of the people who manage the company. This is an important change in the expectations of Indian shareholders. In the old days, shares were taken up if some well-known industrialist or business family lent their names to the project. Although in some cases this may still be a factor, it has become generally a less important influence. This is mainly because the shareholders have become more well-informed and are able to exercise more objective judgement. In effecting this change, the community of brokers, merchant bankers, underwriters and institutions have played a very useful role. They are constantly analysing the performances of companies and educating investors.

Judged against the expectations of investors, we have fared reasonably well and that is why our investors stay happily with us. However, we do not seem to attract the speculators who expect dramatic returns which, in many cases, is also a reflection of the risks. We realise that it is necessary for us to continue to enjoy the confidence of our investors—individuals as well as institutions—and our policy is to build up that longer-term confidence through our conduct of the business and our dealings with the investors.

III EMPLOYEES

In the ultimate analysis, the people who make an organisation what it is will be those who work in that organisation. This is true of a family, a religious group, a political party or a company. Most large business organisations have access to finance from the same sources; they have access to similar sources of technology and they can recruit people from the same national market. And yet, their performances vary considerably. This mainly is because of the kind of people who work in the company—at all levels from the Board down to the shop floor.

There is no gainsaying the fact that it is the people, who make policy decisions regarding the direction of the company and are responsible for the execution of such policies, that can make the most significant difference to the performance of a company. One can have the most dependable source of finance, the finest of technology, the best of skilled workmen and yet perform disastrously. This was probably best illustrated by the fate of Rolls Royce in the UK a few years ago and, unfortunately, we have several examples of this in our own country too.

In this connection, I would like to bring to your attention, as shareholders, a very serious situation that is developing in our country with regard to the motivation and rewarding of this class of people in the company. Till this year, a director of a company in India could be paid Rs. 7,500 per month, certain taxable perquisites like a car and driver, furnished accommodation, servants' salaries, leave travel and a maximum commission of half of his salary. A person who gets the maximum salary of Rs. 7,500 per month, has a take home salary of only about Rs. 2,270 per month, after deduction of income tax, provident fund and 10% contribution towards house rent. Out of this Rs. 2,270 per month, most people at that level would have to pay for some insurance (say Rs. 300 per month) and expenses on education of at least two children at University level (say Rs. 400 per month). That would leave Rs. 1,570 per month. From this net income, the family has to be fed and clothed and one has to meet several other obligations and responsibilities. Most of us in India have responsibilities for aged parents or a widowed sister, or aunt, or someone in the family who looks to the better-employed person for financial sustenance. In addition, we have to provide for small gifts at weddings and other festive occasions to family members, and to have as house-guests relatives from up-country. All these are obligations which we, as a nation of joint-family and community oriented people cannot ignore.

Then, of course, there is the added annual nightmare of having to find the necessary funds for Compulsory Deposit. In this case, it will probably amount to Rs. 17,300 to be found by March every year. The only source to compensate for this is the commission. On the commission of Rs. 45,000 per annum, the income-tax is Rs. 32,200. Therefore, the net amount would be Rs. 12,800. That would not meet the Compulsory Deposit needs.

This, then, is the picture of the man at the top. I can assure you that it is very different from what the public has been led to believe in the recent past. In many cases, these men manage to avoid having to borrow only because they may have inherited wealth or savings from their younger days when the burdens were less.

But now let us look at a young man joining a company like ours. He has done five years at an

LINTAS-HLL.AGM.IA-2520

IIT and in several cases an additional two years at the Institute of Management, to take his MBA. He has an outstanding record both at the IIT and IIM and represents some of the best talent in our country. We start him as a management trainee at Rs. 1,150 per month including bonus. After training of about two years, his salary will be Rs. 1,470 per month including bonus. After deduction of income tax, he will get Rs. 1,390 per month. To get even a room in a city like Bombay, he will have to pay Rs. 500 per month. Most companies cannot provide accommodation. Even if the company assists him with modest accommodation, he has to pay 10% of his salary. In that case, his net salary is Rs. 1,150 per month. If provident fund is also taken into account, the net salary will be further reduced to Rs. 1,020 per month. On this, he has to feed and clothe himself. It is hardly possible for him to save.

Now, contrast this with the income of a trader or a well-to-do farmer, or a professional lawyer, doctor, consultant engineer or accountant. In all these cases, there is no such restriction in income. Therefore, it is indeed a severe inequity to have such a restriction of salaries and perquisites of business executives. As shareholders of the company, I would like you to take note of this because if this policy continues over the years, it will become more and more difficult to attract and retain good management. And, as I said earlier, it is the quality and commitment of the management that will make all the difference to the performance of a company.

Restrictions on managerial remuneration are similar to a price control. In the last decade or so, we have seen what price control did to several industries like cement, steel, sugar, vanaspati, paper, etc. It led to shortages, black marketing, lack of investment which accentuated the shortages and an inevitable erosion in quality. I am afraid the present 'price control' on management will inevitably lead to the same situation. There will be greater tendency to evade the provisions and greater reluctance for the best people to take up professional management as a career. In this situation, companies such as ours which will not indulge in any dubious practice will selectively suffer even more. I am sharing this concern with you because you have an interest in the continued growth and performance of this organisation. Let us all hope that just as in the case of other price controls, Government will find it possible to relax some of the rigidities in the existing provisions.

When I think of people in our company, the ones who stand out most in my mind are our workmen who work in night shifts in factories, people who have to work in pioneering projects, people who work in villages and rural areas to improve supply of raw materials, our salesmen who trudge around in bazars all over the country in the heat and the dust, our clerical staff who work into the late hours to reconcile their control figures, our supervisors, who have mostly come up from the ranks, and have the delicate task of interpreting to each other people who are below them and above them, the many people who provide the services that keep the operating arms going—and our managers who are almost married to the company.

There are 9000 of us working in this company. We have 22 factories located in all parts of the country from Srinagar in the north to Coimbatore in the south, and from Shamnagar in the east to Ahmedabad and Bombay in the west. From our four regional branches, our 400 salesmen cover every town over a population of 20,000 in the country—and thus, a total of 220,000 outlets in 3,660 markets. In addition, our stockists cover over 60,000 outlets in 6,500 markets through their own resources.

It is this perpetual activity in the factories and the market place by numerous individuals that keeps this company going. I have often wondered in my travels and visits as to what keeps us all so committed and unified as a team. There must be many factors including some that we are not even conscious of. One of the most important factors would be the way people are treated. If they are treated with honesty and dignity, and are allowed to participate in a process of constant communication regarding the common objectives and activities, they respond with commitment. This applies to all levels whether they are workmen or directors. Therefore, a lot of time is spent by senior managers with people, listening to them, working with them, talking to them and feeling for them. When I go on a tour with a salesman in Junagadh or in Assam, my entire focus is on that salesman, his effort at persuading the retailer to buy another dozen tablets of soap, or a bottle of shampoo. It is that kind of effort carried out by hundreds of them, day after day, that keeps the product moving. When the market work is over and we sit down for lunch or dinner, we invariably talk about personal problems; and in several instances these conversations have helped me gain a better insight into the feelings and aspirations of salesmen, how they have to work odd hours, how they cope with the separation from their families, how they manage to age without impairing their work, how they cope with diabetes or the expenses of marrying off a daughter, etc. On these occasions, the barriers of rank and status drop and we become ordinary human beings to each other, with similar problems and aspirations. A bit of the salesman's problems get transferred to me so that when I return to the comforts of my office, I can still feel for him and many like him.

Then again when I go to a Pan Room or an Oil Refinery, and see the people who make soap or clean a hot filterpress, I do feel for them and the physical effort that they have to put in day after day, year after year for thirty to forty years. These are men who were young with me but now are burdened with the same concerns—about sons waiting for jobs, daughters waiting to get married, wives who are in indifferent health, etc. When we talk about these things we come closer. The young man who was an athlete twenty years ago is a mature father who likes to talk about old days, as well as his present concerns. The differences in rank fall away and a human relationship is established.

In my experience, it is these human contacts which keep one sensitive and interested. Without them, one might as well be operating a huge machine.

The other major factor in evoking commitment and loyalty from people is the force of example by seniors. Unless we have total commitment to the common objectives in the top layer, all exhortations are in vain. Therefore, one of our main objectives has been to sustain this tradition of commitment and hard work at the top, which has existed in our company over decades.

Another warming feature in our company is the loyalty of people who have left the company to join other organisations or into retirement. I have often wondered and discussed with some of them as to what contributes to this continued interest and genuine loyalty to the company. The most common factors mentioned are the pride they feel in having worked in an honest and decent environment where no one asked or expected one to do anything that was mean or dishonest, and where one could feel that the people above cared.

As we grow and expand, one of our major concerns would be as to how we keep up this human and informal touch within the company, with an increasing number of employees at all levels. It will require more time and effort, especially on the part of the senior people.

Lest you think that we have uninterrupted good relations all the time and at all levels, I should add that we have our occasional differences and disputes. As a company, we believe that trade unionism is a right of our workmen, and it is to our advantage to have strong union leadership with whom management can negotiate and settle issues concerning unionised workmen. As of now, we have longterm settlements in all our major factories and they have been arrived at as a result of considerable amount of discussions with our workers. We believe bilateral settlements are much more desirable than imposed ones. Therefore, we are particularly glad that in our largest factory in Bombay, with over 4,000 people, we have recently concluded an agreement. The largeness of the numbers had made the task more difficult; but the continued personal contacts among those who work together as workmen, supervisors and managers and the ultimate belief that we have a common interest in the company have contributed to this agreement, and a similar one in our large establishment in Calcutta.

Wherever intelligent and free human beings work together, it is only natural that there will be differences of opinion and when they do occur the best we can do is to be always prepared to discuss and to be honest in one's dealings without being cowed down by threats or blackmail. In the end, it is in nobody's interest, not even that of the employees, if an organisation is not effectively managed. This realisation has to be shared by all who work in the organisation and, in our case, this seems to be a well-accepted norm.

IV THE TRADE

Another very important band of people who help in the operations of the company are our transporters, forwarding agents, stockists and retailers. We have nearly 4,000 Redistribution Stockists (RSs) in all parts of the country who distribute our products through over 700,000 retail outlets. Some of them—like Khemchand Dayaljee of Poona and Ahmedabad, Bhailal Raichand of Bombay, Poonam Enterprises in Jullunder, Raj & Co. in Jorhat, Bombay Stores in Bikaner, Nala Chakravarty Chettiar in Madras, Murlidhar Jain in Bhopal—have been with the concern for more than one generation. In their case, one generation gives place to another at a slower pace than that of the Chairmen of Hindustan Lever. Therefore, you come across some of them who are constantly comparing one generation of sales managers, Directors and Chairmen with the preceding generations. They are polite enough not to give offence through comparisons unfavourable to the present generation—but their nostalgia is a kind of reminder that the bonds are older than what the present generation in the company knows. Some of them are the shrewdest traders in the country and the most well-respected ones in their own towns.

At the other end of the spectrum, you have the young, self-made, first generation stockist who has worked his way up and is still working the markets himself. For instance, there is Marwah in Kulu, who came as a boy into Himachal Pradesh with his refugee father from West Punjab. After a spell in Government service, he set himself up in business and built it up himself, trudging the valley to sell the products. Even now, he has to go by bus into the Lahul/Spiti valleys to distribute our products. At the other extreme of the country, there is C.J. Thomas in Tiruvella, Kerala, who was an RS's salesman in a neighbouring town till we started a stockist's position in his town. Now he has built up his business to such an extent that financially he is better off than the Chairman of Hindustan Lever! Then, there is Jagdish, our RS in Jammu, who sold cigarettes in war-affected villages near the Pakistan border a decade ago, but is now a prosperous trader in his own right. In this younger generation, you see the resurgence of the innate trade instinct of the Indian all over again. It is not confined to one region or one community.

In our dealings with the traders, we demand honest trade practices and in return we ensure an adequate return on their capital with maximum security of business. This relationship has stood not only the test of time but also the vicissitudes like price controls, shortages, etc., and under all circumstances we have been able to ensure equitable distribution of products at fixed prices throughout the country. It is a partnership in which there is a commonality of interests and this results in a mutual loyalty which often extends beyond purely business relationships. However, one of the strictest rules we enforce is that none of our employees at any level builds up any obligation towards any trader.

LINTAS-HLL.AGM.18-2520

While we demand a very high standard of performance and integrity from our RSs, we also strive to ensure that the business is stable and profitable for them. We believe that unless a business yields a reasonable return it cannot be sustained. Therefore, we take care to work out the risks and profitability of our RSs to ensure that they are adequately rewarded. Assistance is given to them in training their staff and improving their controls. But ultimately their success depends on the commitment they have and the quality of judgement exercised by them in their dealings with the retail trade in their town. When an RS gets into difficulty, it is usually because he has lost his touch with the market and the trade and has allowed himself to be insulated from the market. This is a temptation which befalls them as the business grows and they build up an organisation that makes the top man more remote. But in a distribution system, it is vital that the man at the top has a real and up-to-date feel of the trade. It is therefore sometimes necessary to split up the stockists' business in large towns to provide for this more intimate knowledge and contact with the market. The management of this vital distribution system is one of the valuable skills which our company has acquired over the decades. It still constitutes an important part of the training of our managers.

Although I have dealt with our distribution system in another AGM speech, the more I see of the world and the trade in many places, there is very little that can beat the combination of shrewdness, hard work, austerity and commercial judgement of the Indian trader. While it is easy to criticise their behaviour at times of shortages, it has to be remembered that they are the backbone of one of the most efficient and, certainly the most economical distribution systems in the world. Long may we be protected from State bureaucracy or from giant chains engaged in distribution. We, as a company, are proud to be associated with our traders and in many ways we have shown them that longterm goodwill and profitability are best built up through honest dealings, as opposed to speculative ones. Companies like ours have a role to play in upgrading their skills as well as their ethics.

V SUPPLIERS

We have a diverse range of suppliers ranging from large chemical companies to the landless buffalo owners in Etah. In between, we have a large number of medium and small scale enterprises which supply a variety of goods. Out of Rs. 46.6 crores worth of chemicals and packing materials that we bought indigenously in 1977, almost a third came from smallscale units. In many cases, we have helped either to set up the unit, or to have its technology improved in order to meet our specifications. For instance, in the case of Mr. Y.H. Jhaveri of Vasu Chemicals, who is now supplying laboratory chemicals, we helped him with all technical information as well as initial guidance. In the case of Mr. Alok Nandi of Plastiko Industries, Bombay, we improved his process through our technical inputs and reduced wastage of raw materials in the manufacture of plastic containers. This helped Plastiko Industries to become more efficient and profitable. In three years, their turnover increased by 100%.

Unlike many other businesses, an important class of suppliers who deal with us are farmers and small traders—in oilseeds and milk. As we are the largest users of minor oilseeds in the country, we have in many cases to organise their collection and establish a market for them. For instance, when we discovered the qualities of sal fat for industrial use, we had to pioneer with local people in Orissa the collection of seeds from the forest, the extraction of the oil, the disposal of the cake and a host of operations associated with these primary tasks. After a few seasons, it became a regular trade and the activity was extended to other States.

Another important example has been that of our suppliers of milk in Etah. In the early stages, we were more concerned with the collection and processing of milk rather than the supply of milk. But we learned very soon that we had to get involved in the actual production and supply of milk by the farmers. It was a long and arduous learning process both for us and the farmers. But looking back, it has been a very gratifying experience for many of us and constitutes an outstanding example of how industry based on farm produce can make a significant contribution to rural development.

The primary objective of the project has been to improve agricultural productivity allround. That is the only way to increase output from animal husbandry which is an integral part of the total rural economy. Therefore our relationship with the farmers in Etah had to be extended beyond the sphere of milk supplies. As a result of our common effort, in these areas covered by our Integrated Rural Development programme, it has been possible to raise agricultural productivity by almost 30% in two years. This of course gets reflected in animal husbandry and milk output as well. The task is by no means completed. But it is another example of how one has to relate to primary suppliers and involve our organisational skills for mutual benefit.

VI CONSUMERS

In this company of people, the most numerous and perhaps also the most powerful constituency is that of the consumers. Our interphase with the consumer is over a whole range of products in all parts of India and among all strata of society—spreading from the Himalayas down to the extremities of our subcontinent.

When I was a young schoolboy in a village in Kerala, my seniors considered me too weak to be taken into the football team and it was my habit to hang around on the sidelines every evening in the hope that if there was a vacancy among the fourteen players (seven a side), I might get a chance to play. And they used to advise me, somewhat teasingly, that I should try using Dalda for health and vigour. That was almost forty years ago when Dalda was beginning to appear in the south. None of us knew then that I would end up, not only using it but, one day, making it by the tonne!

A few years ago I was in a small village called Sirsa in the Lahul Valley, between the Himalayas and the Karakoram ranges, and had gone off on a short trek. On the way back, down the slopes of the mountain, I found a woman with her baby and a calf squatting and washing the family's clothes. She was using water coming down the hill and beside her, in this most remote mountainous part, was a packet of Surf!

More recently, on a trek from Darjeeling to Sandakphu three years ago, I had stopped overnight at a goat shed at Molle, which is about 10,000 feet high and abandoned in those winter months by man and beast. As we had our evening meal, and were sitting around a bonfire, we were joined by a group of Nepali farmers wending their way from the valley down below to their remote village in Nepal. They had gone down to buy salt and household necessities. One of them was soap and the soap they had gone all the way to buy was Sunlight!

When I was visiting my home in Kerala last year, I was surprised to find that even in my small village now there was a fulltime stockist, not only for the normal consumer products but also for our animal feed. To most housewives we are the source of many products they use on a day-to-day basis. But in this town, I was surprised to see some people to whom our company was a cattlefeed company. That is a measure of the confidence and satisfaction we enjoy in diverse products and places.

Whether it is in the remotest estate of Assam, or among the camel tracks of Rajasthan, you will find our consumers—loyal and satisfied and coming back generation after generation for the old products as well as some new ones.

What does a consumer expect from us? I think her first requirement is reliability in quality. Then comes the reasonableness of the price. In spite of all the difficulties in obtaining materials and the pressures of inflation, cheap competition, etc., we have managed over the years to maintain levels of quality that are generally above that of others. We have also introduced different qualities of products for various segments of consumers so that it is within the range of each category of consumers. In times of shortages, we have spent a lot of effort disciplining the trade to ensure equitable distribution at the agreed price. One cannot claim that it was perfect but it had certainly ensured a more dependable service to the consumer whose continued confidence we have assiduously built up over the decades.

The consumer also expects from us improvements and new products. Like everything else in life, there is a desire for change. So we constantly try to improve and change—not for the sake of change but in response to a felt need or a proven improvement. This again has helped to satisfy the consumer.

And, of course, we are constantly adding to the network of our sales and distribution system to cover more and more remote parts of the country, as the years go by. The packet of Surf I saw was the result of the efforts of our enterprising distributor in Manali who takes our products once a fortnight by bus for distribution in the villages in the Lahul Valley. As years go by, we add more and more of such places to our ever-widening distribution system and thereby add more and more to this company of people.

VII CONCLUSION

What you and I are involved in is truly a company of people. Each segment has its own expectations. The investors want an attractive return on their capital, with reasonable growth and minimal risk. The employees want improved standards of living and with security and fair treatment. The trade wants adequate profits and security in their business. The suppliers want a reasonable price and honest dealings. Our consumers want the best product at the lowest possible price. Many of these objectives are evidently conflicting. And it is the job of those of us whom you have entrusted to manage this company to reconcile these different interests and to provide an optimal solution which will keep this company of people going from strength to strength and in harmony — despite the different sectoral interests and our national diversities.

(Note: This does not purport to be a report of the proceedings of the Annual General Meeting.
If any shareholder wishes to have a copy of this speech in booklet form, please write to:
The Communications Department, Hindustan Lever Ltd., P.O. Box 409, Bombay-400 001.)

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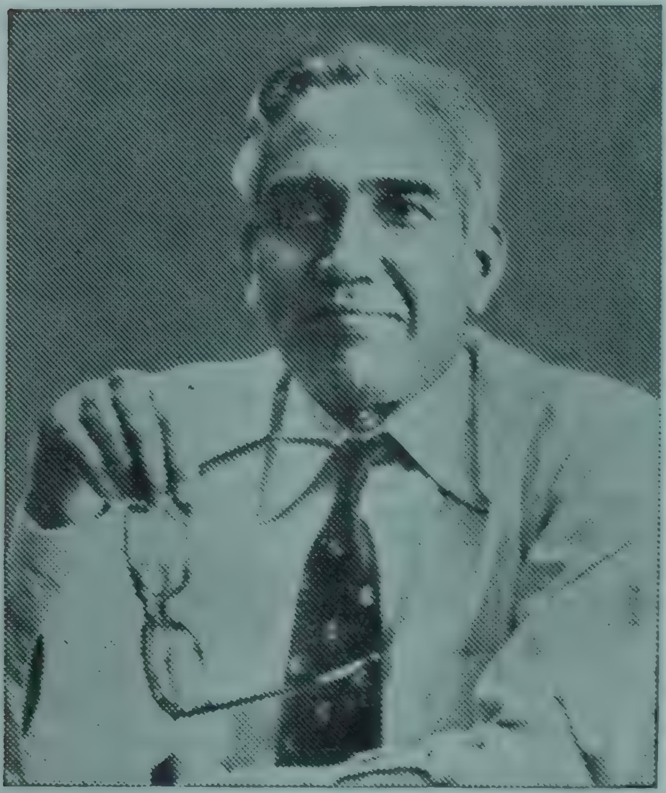
Shaw Wallace Group Improvement continued in 1978

Highlights from Review by Mr. S.P. ACHARYA., Chairman and salient financial data



S. P. Acharya

Production, sales and profit of the Parent Company as well as of the Group recorded improvements in 1978. The Group turnover in India was Rs 120 crores compared with Rs 104 crores in 1977.

DIVISIONAL RESULTS ADHESIVES

This Division produces a range of glues for industrial use which are very highly regarded by customers all over the country.

AGRICULTURAL INPUTS

Quantitative turnover was once again a record and reflects the painstaking extension work and development of a first-class marketing organization by the Company over several decades, covering not only straight fertilisers, complex material and mixtures but also livestock feeds, seeds, spraying and dusting equipment and a comprehensive range of agro-chemicals.

COMPUTER SERVICES

This growing Division turned in a creditable performance and made a useful contribution. Operations from the computer centre in Calcutta have grown significantly. The fine reputation of the Division, both in India and overseas, promises growth and satisfactory profitability in the years to come.

EXPORTS

The Export Division turned in a profit despite the continuing problem of quotas for export of garments.

We have received a renewal of the order from the U.S.A. for the supply of ossein manufactured by Shaw Leiner Ltd. in quite large quantities.

Quantities of our own production of glue have also been exported to the satisfaction of overseas customers, as well as a range of tools and engineering products produced by small scale industry.

LIQUOR

While the Liquor Division once again produced a satisfactory result, its growth has been restricted by the extension of prohibition to further districts and states.

The Division naturally is devoting its attention to the upgrading of its existing range of products and to exports. The Director's Special Whisky, a mature malt whisky, introduced very recently, has been well received and promises to sell well. The new liqueurs—Coffee, Mango and Pan—exported to overseas markets as well, were well received. Our quality control and Research and Development efforts continue to be given the utmost importance.

SHIPPING

The continuing depression in international shipping, coupled with very long berthing delays at most Indian ports, reduced the number of callers and hence our agency income was less than in the previous year.

SUBSIDIARIES

The profitability of Cruickshank & Company Ltd. remained very satisfactory.

Maharashtra Distilleries Ltd. had a good year and its products remain very popular. The new malt whisky—Director's Special—is produced at this installation and the production facilities are of a very high standard.

Despite the loss of materials during the exceptional floods in West Bengal in October, 1978. The Hooghly Flour Mills Company Ltd. turned in a satisfactory performance and looks forward to steady growth. The Livestock Feeds Division fared even better than in 1977. Its products are very popular in West Bengal.

Sales of the Indian Yeast

Company Ltd. were once again a record but profits were somewhat below 1977. The international quality of our yeast has been proved by the very satisfactory repeat demand in Sri Lanka. The Research & Development laboratory, one of the best of its type in South East Asia, was formally inaugurated in January, 1979.

Shaw Leiner Ltd. recorded a further improvement in its working with a profit for 1978 of Rs 20 lakhs. The company has received an industrial licence for expansion.

Production in 1978 of Tezpore Tea Company Ltd. was only marginally less than in 1977 despite drought in the early part of the year, but the boom conditions experienced in 1977 did not continue into 1978 with the result that profitability was substantially below 1977 levels.

Shaw Wallace & Hedges Ltd. in Sri Lanka showed satisfactory profits for the year ended 31st March, 1979. The company has invested in two garment manufacturing units which are essentially for export and prospects for 1979/80 are good.

The Year at a Glance

(Rs in lakhs)

	1978	1977	Increase
Group			
Turnover	12041	10229	18%
Profit before Taxation	669	596	12%
Parent Company			
Turnover	10775	9487	14%
Profit before Taxation	298	193	54%
Profit after Taxation	136	79	72%
Earning per Ordinary Share	Rs 3.30	1.89	75%
Dividend per Ordinary Share	Rs 1.50	1.25	20%

ASSOCIATE COMPANY

SKOL Breweries Ltd. had a very good year with a rise in profit from Rs 25 lakhs to Rs 47 lakhs. Exports of its beer have been made in encouraging quantities to various countries and especially to West Asia.

Prospects are contingent on the impact of the prohibition policy.

NEW DEVELOPMENTS

Construction of the Research & Development plant at Haldia, to which I referred in my previous year's review, is in progress, and is expected to be completed by August 1979.

We have not seen fit as yet to proceed to implement the approval given by the Government of India to the purchase of ships, in view of the continuing international recession. The matter remains under close study.

The report on the project of Rajasthan Phosphorus and Chemicals Ltd., a company promoted jointly by the Rajasthan State Industrial & Mineral Development Corporation Ltd. and ourselves to manufacture elemental phosphorus and related products, makes promising reading Additionally, the company's own organo-phosphorus manufacturing facility at Haldia will depend greatly on the regular and economic supply of materials derived from elemental phosphorus.

PROSPECTS

Prospects for 1979 remain satisfactory and it continues to be the Group's endeavour to expand. In view of the Group's operations being spread over several states, the impact of power shortage and such like problems is by and large averaged out. Nevertheless, the Group could increase its production and profitability if power supply was freely available.

RURAL DEVELOPMENT

In 1978, the company joined five other members of the Bengal Chamber of Commerce & Industry in intensive development of the Barasat Block in West Bengal and very good work has heen done in increasing productivity of the land and development of small-scale industry.

GENERAL

The Group reached agreement with unionised employees in all the units on an all-India pay structure which provided for the merger of the bulk of the dearness allowance into pay. The negotiations were characterised by a spirit of give and take and I believe all parties have reason to be satisfied with the structure and the terms.

My thanks are due to employees throughout the Group who have contributed to the progress achieved during 1978. I should in this context make a special reference to the large team of professional managers which the Group has the good fortune to possess, and who have overcome the many problems incidental to business in this country. I have no doubt that with their support, as well as the support of a dedicated team of employees at all levels, the Group will make good progress in 1979 and subsequent years.

Shaw Wallace

FDS/SW/1

HEAVY ENGINEERING CORPORATION LIMITED

(A Government of India Enterprise)

MATERIALS MANAGEMENT
DIVISION/HQ. DISPOSAL
SECTION
P.O. DHURWA, RANCHI-834004

SHORT TENDER NOTICE FOR DISPOSAL OF:

Rly. Materials; Bearing plates of different sizes Packing picks, Acute crossing for Scissor, Rail 90R, Cut rails, Check rails, Load rails of different size, Dog spikes, Tie plate, Rail long, Bar Tommy., B.P. Hammer, Drill bit, Diamond drill bit, Anger, fish plate, Hose with fittings etc. of different size.

Spares: For vehicle, for fork lifter, for Yale voltas fork lifter. for Jambo Platform truck etc.

Intending tenderers may see the above materials at respective sites (HMBP) during working hours on working day. Tender paper may be had from the office of Manager (Mat. & FPS) HQ. on payment of Rs. 10/- (non-refundable) payable to M/s. Heavy Engineering Corporation Limited, Ranchi-4 by crossed postal order only from 21-7-79 to 1-8-79. Sealed quotation will be received in Ranchi upto 3.00 P.M. on 4-8-79 and will be opened on the same day at 3.15 P.M. in presence of attending tenderers. Tenderers may obtain tender paper well in advance so as to reach this office within the stipulated period. The Corporation will not be held responsible for any postal delay. Tenders should be accompanied with an earnest money @ 2% of the quoted amount in the form of demand draft in favour of M/s. Heavy Engineering Corporation Ltd., Ranchi-4 or in cash receipted by Chief Cashier/HQ. HEC Ltd.

MANAGER (MAT. & FPS)HQ.

davp 726(58)/79

COMPANY AFFAIRS

Jay Shree Tea

On a higher turnover, of Rs 30.92 crores (Rs 28.98 crores) Jay Shree Tea and Industries Limited has reported a lower gross profit of Rs 486.97 lakhs for the year ended March 31, 1979, against Rs 736.33 lakhs in the previous year because of a set-back in tea prices. After providing Rs 142.79 lakhs (Rs 131.01 lakhs) for depreciation and adding Rs 3 lakhs being development rebate reserve and Rs 4 lakhs being development allowance no longer required, the profit comes to Rs 351.18 lakhs (Rs 615.73 lakhs). Allocations include development rebate reserve nil (Rs 2 lakhs), development allowance reserve Rs 1.30 lakhs (nil), and taxation claims Rs 200 lakhs (Rs 280 lakhs). The directors have maintained the dividend at 20 per cent for the year, which will absorb Rs 54.67 lakhs (same).

The directors state that with the withdrawal of export duty, the tea prices should slightly imporve during the current year. In spite of increased operating costs and bearing any adverse developments, the company's other units should also be able to maintain or improve their production and working results. They look forward to 1979-80 to be better than 1978-79.

Khandelwal Ferro

Khandelwal Ferro Alloys is doing well in the current year. Its turnover of ferro manganese in the first five months has been Rs 4.90 crores as against Rs 3.52 crores in the corresponding period last year and of steel tubes Rs 4.49 crores against Rs 3.64 crores. Giving this information to the shareholders at the annual meeting in Bombay, the chairman, Mr M.R. Ruia, expressed the hope that the ferro manganese plant will continue in full production and that the scarce availability of manganese ore and coke will not pose any problem. As regards steel tubes, he said that the management is examining the implications and economics of the central government's policy directives in regard to domestic and export markets so that production and sales may be suitably planned.

Larsen & Toubro

Larsen and Toubro Limited has made considerable progress during the year ended March 31, 1979. The turnover and other income of the company reached Rs 116 crores for the year ended March 31, 1979, the highest on record. The turnover and other income of Rs 79 crores for the previous year ended March 31, 1978 was lower than planned on account of a disturbed labour situation at the Powai works. Profit after tax and investment allowance reserve at Rs 667 lakhs has shown an improvement over the previous year's figure of Rs 473 lakhs.

The directors have decided to recommend a dividend of 17 per cent for 1978-79 which is higher than the dividend of 16 per cent paid in the previous year. The consent of the Controller of Capital Issues has been received for the proposed issue of right shares in the proportion of one to four at a premium of Rs 12 per share. The issue is to be subscribed in two instalments of Rs 11 each. The first instalment will be payable in October, 1979.

The current years' working of the company is reported to be satisfactory. Order booking as on date is higher than in the corresponding period of the previous year. The order backlog as on May 31, 1979 stood at Rs 98 crores against Rs 89 crores on May 31, 1978.

Escorts

Escorts sales income till June 25, 1979, increased by 33 per cent to nearly Rs 80 crores from around Rs 60 crores in the same period last year. Addressing the shareholders on the occasion of the company's annual general meeting recently: its chairman and managing director, Mr H.P. Nanda, stated that at the current pace of progress, nothing untoward happening, the company was well poised to cross Rs 175 crores sales income in 1979 as compared to Rs 144 crores in 1978. Total sales of tractors (Escort and Ford) during the period January 1-June 25, 1979 were over 9,200 as compared to 7,800 and those of Rajdoot bi-wheelers 20,400 as compared to 18,700 in the corresponding period last year. In 1979, the company expected to sell 20,000 tractors (Escort 12,500; Ford 7,500) as against 17,000 of both brands in 1978. Rajdoot bi-wheeler sales this year were expected to be 43,000 as against 38,300 in 1978. Sales of all other products such as industrial equipment, auto and railway ancillaries, heating elements etc. als registered significant increases

Escorts proposes the introduction of a new model of Escort tractor with additiona features, ring-carrier pistons for increased engine life as well as the technical collaboration with Yamaha of Japan for third generation motorcycles and the joint venture with JCB of UK for the manufacture of excavator-loaders.

Production activity in all lines was being expanded with substantial investment in new plants and machinery or other production facilities, largely through self-generation of resources, keeping borrowing to the minimum. Investments in fixed assets of nearly Rs 10 crores during 1978 and thereafter of Rs 5 to Rs 6 crores planned annually would provide the company additional earning capability. Tractor operations were being expanded to achieve production of 16,000 Escort tractors and 12,000 Ford tractors within a period of two to three years. Similarly, the company had also applied to the government for increasing its licensed capacity of Rajdoot bi-wheelers to 60,000.

Joint Venture

Company's application for the grant of a letter of intent for the manufacture of 100-650 HP range high-speed diesel engines through a proposed joint venture with M.A.N. of West Germany was under consideration of the government of India. These engines will be of the current West German shop-floor design and have the latest technological features, besides showing the best power-weight ratio in the world. This venture will meet domestic requirements for stationary, marine, and automotive applications, while engineering skills will be exported to other M.A.N. licensees in Asia, and perhpas other parts of the world too.

Mahindra Ugine

Mr Harish Mahindra, chairman of Mahindra Ugine Steel Company has told shareholders at the annual meeting held in Bombay recently that the substantial expansion of the company's capacity is fast being implemented The blooming mill is expected to be commissioned in September next and commercial production will start from October 1979. The steel melting shop with the 40 tonne electric are furnace and the 10 tonne slag furnace are also expected to be commissioned in October 1979. The chairman has stated that on completion of the expansion, the installed capacity of the plant will increase from 24,000 tonnes to 75,000 tonnes per annum. The output and sales during the current year are likely to go up by 8,000 to 10,000 tonnes because of the operation of the expanded capacity in the fourth quarter of this year.

Goetze (India)

Mr H. P. Nanda, chairman of Goetze (India) Limited told shareholders at the annual meeting in New Delhi recently that sales during the first five months of the current year have touched Rs 257.46 lakhs against Rs 175.72 lakhs in the corresponding period of 1978. The production of piston rings is 7,359,777 against 5,696,230. Reviewing the performance for 1978, Mr Nanda stated that the sales amount to Rs 483.23 lakhs as against Rs 348.12 lakhs in 1977. The Bangalore plant, which commenced commercial production in November last has contributed about 15 per cent of the aggregate sales. The Patiala plant continues to show a growth of 10 per cent.

The gross profit before depreciation and interest is Rs 197.62 lakhs as against Rs 117.55 lakhs showing an increase of over 66 per cent. The net profit after tax and tax adjustment for the previous year comes to Rs 136.56 lakhs (Rs 40.63 lakhs). The Bangalore project has already reached 40 per cent of its rated capacity with monthly production having reached 600,000 rings. This is expected to grow progressively to attain 80 per cent utilisation of its rated capacity by the year end. The new project, besides conventional cast iron piston rings will also manufacture special type of rings both in material and designs, including large diameter piston rings for diesel locomotives and marine engines.

Bombay Dyeing

Bombay Dyeing has shown good results for the year ended March 31, 1979, compared to the previous period of 15 months. The directors have proposed a final dividend of Rs 3.75 per share, making a total of Rs 5 per share or 20 per cent. According to preliminary figures, gross sales amount to Rs 97.29 crores as against Rs 108.02 crores of the preceding 15 months and the operating profit is Rs 7.31 crores against Rs 5.79 crores. After taking into account Rs 15.73 lakhs (Rs 143.06 lakhs) being the profit on sales of assests and Rs 46.68 lakhs (Rs 74.68 lakhs) being the excess provision in previous years, Rs 265.10 lakhs (Rs 233.60 lakhs) has been provided for depreciation and Rs 156 lakhs (Rs 180 lakhs) for investment allowance reserve. With no tax liability which claimed Rs 5 lakhs last year, the net profit is Rs 3.72 crores compared to Rs 3.78 crores previously. Out of this, the dividend will absorb Rs 1.04 crores.

During the year the company has installed machinery worth Rs 7.82 crores and Rs 1.2 crores has been spent on buildings. The company has obtained necessary clearance and is now awaiting issue of an industrial licence for the DMT project.The plant will be located at Patalganga, a backward area of Maharashtra.

Mysore Lamp Works

The Mysore Lamp Works Limited, Bangalore now fully owned by the Karnataka state government, has earned a profit of Rs 37.82 lakhs (before tax) in 1978 after registering a 49.8 per cent increase in its sales during the period. Announcing this at a news conference in Bangalore, the chairman of the company, Mr. V. Venugopal Naidu, Home secretary to the state government, has said that the sales during the year have gone up from Rs 363.40 lakhs in 1977 to Rs 544.30 lakhs—the highest so far achieved. The company had earned a profit of Rs 5.83 lakhs in 1977 and a loss of Rs 9.53 lakhs in the previous year. The sales during the first five months of this year are also up by 50 per cent over the corresponding period last year. The year 1979 will also be another year of record performance in sales and profitability, according to the chairman.

Mr Naidu has said that the company is now being fully geared to launch upon a couple of expansion and diversification programmes. Stating that there is an acute shortage of glass shells since the demand for glass lamps and fluorescent tubes has increased considerably during the last three years, Mr Naidu has said that the company is giving top priority to the implementation of a Rs 300 lakh glass shell project. The import component of the project, mainly machinery, will be worth Rs 120 lakhs.

Oriental Bank

The Oriental Bank of Commerce Ltd proposes to enter the capital market shortly with a public issue of Rs 30 lakhs. Speaking to newsmen in New Delhi recently, Mr M. K. Vig, chairman, stated that the issue of 300,000 equity shares of Rs 10 each at par is being made to further strengthen the capital base of the bank in the light of its fast expansion and to broad-base the bank's shareholding, thereby reducing the Thaper group's holdings to less than 40 per cent of the total share capital of Rs 52 lakhs. The authorised capital is also being raised from the present Rs 43 lakhs to Rs 100 lakhs. The bank has declared a dividend of eight per cent for 1978 following a record net profit of Rs 20.14 lakhs as against Rs 8.61 lakhs in the previous year. The bank expects to pay a minimum dividend of 10 per cent for the current year.

During 1978, deposits in the bank have gone up by Rs 34.53 crores to Rs 170 crores showing an increase of 25.41 per cent. This compares favourably with an increase of Rs 26.80 crores in 1977 and Rs 19.60 crores in 1976. The bank's advances have increased by Rs 23.51 crores (27.75 per cent) to

Rs 108.23 crores. Of total lending the priority sector other than exports claims 38.02 per cent, i. e. Rs 41.15 crores, as against 30.5 per cent achieved by the banking system.

The bank has opened 53 new branches during 1978 of which 43 are in rural and semi-urban areas. Out of 286 branches 64 per cent are located in rural and semi-urban areas. The bank has started foreign exchange business since January 1, 1979. This will help the bank improve its profitability. The bank's name is to be shortly changed to "Oriental Bank Ltd."

Voltas-Tata Merlin Merger

The directors of Voltas have approved the amalgamation into Voltas with effect from July 1, next, of Tata Merlin and Gerin Ltd, National electrical Industries Ltd and Wandleside National Conductors Ltd according to the scheme of amalgamation approved by the boards of the three companies. The amalgamation will be subject to the approval of the appropriate authorities, financial institutions, shareholders and creditors. The amalgamations are also subject to a suitable declaration by the central government under section 72 A of the Income Tax Act, allowing Voltas to set off the losses of Tata Merlin and Gerin and National Electrical Industries.

The shareholders of the companies to be amalgamated are to be paid on the basis of the valuation of their shares made by the auditors of Voltas (who are also the auditors of NEI and WNC) and who have taken into account both the current value of the assets of Tata Merlin and Gerin and National Electrical Industries as well as the benefits of tax set-off accruing to Voltas as a result of amalgamations. The fair value of the shares of the companies to be amalgamated as assessed by the auditors, based on which the amalgamation resolutions were passed by the boards of the companies is (face value is within brackets): Tata Merlin and Gerin—Rs 20 (Rs 100), National Electric Industries—(Pref.) Rs 60 (Rs 100) (Equity) Rs 5 (Rs. 50). Wandleside National Conductors—Rs 100 (Rs 100).

It is intended that the shareholders of Tata Merlin and Gerin and National Electrical Industries should recieve to the extent of 75 per cent of the value of their shares by way of 11 per cent secured debentures of Voltas and to the extent of 25 per cent by way of shares of Voltas which for this purpose, will be valued at Rs 150. In the case of Wandleside National Conductors, the shareholders will be issued 11 per cent secured debentures of Voltas. The scheme of amalgamation may, of course, undergo changes in the process of securing the requisite approvals.

Indian Explosives

Indian Explosives Ltd has sold explosives and accessories and fertilisers worth Rs 42.17 crores during the half year ended March 31, 1979, compared to Rs 41.20 crores in the corresponding period of the previous year. While the trading profit is Rs 628 lakhs against Rs 639 lakhs, the estimated profit after interest and tax is Rs 160 lakhs compared to Rs 194 lakhs. While labour relations are improving at Gomia, the power situation has further deteriorated seriously affecting the division's production. Performance of this division in the coming months will depend on how quickly normal power supply is restored. Producttion and sales of fertilisers are slightly higher than in the first half of the previous year but the turnover is lower because of a reduction in the excise duty. The directors have recommended an interim dividend of 50 paise per equity share.

Fibreglass Pilkington

The directors of Fibreglass Pilkington have recommended a 16 per cent dividend on the enhanced capital of Rs 2.59 crores for the year ended March 31, 1979. The dividend will absorb Rs 41.17 lakhs. The gross profit is Rs 2.32 crores (Rs. 2.93 crores). After meeting the charge on account of interest Rs. 32.08 lakhs (Rs. 26.89 lakhs) depreciation and technical know-how write off Rs 38.21 lakhs (Rs 37.61 lakhs) repairs Rs 14.23 lakhs (Rs 7.50 lakhs) and doubtful debts and advances Rs 2.89 lakhs (nil) the profit before tax is Rs 1.44 crores (Rs 2.21 crores). But the provision for tax at Rs 51.22 lakhs (Rs 1.40 crores) improves the picture compared to the previous year. The net profit after tax is Rs 92.78 lakhs against the previous year's Rs 80.79 lakhs.

United Industrial Bank

United Industrial Bank Limited has shown a significant improvement in its working during the year 1978. Its deposits and other accounts increased to Rs 61.78 crores towards the end of 1978 as against Rs 46.85 crores a year before. Its advances also improved to a level of Rs 44.75 crores as against Rs 29.07 crores a year before. Profit during the year at Rs 8.09 lakhs was marginally higher than Rs 8.06 lakhs a year before.

The bank opened recently its 100th branch at Bulbulitala, Burdwan. Founded in 1940 the bank embarked open its rapid expansion and from 27 branches in 1974 it has reached 100 branches in nearly four years. At present it is one of the leading banks of the eastern region.

Capital and Bonus Issues

The government has accorded consent to fresh capital issues by the following companies:

Mahajan Processors Pvt. Ltd: Rs 2 lakh in the ratio of one bonus share of Rs 100 each for every one equity share held.

Bata India Ltd.: Rs 75 lakh in the ratio of one bonus share of Rs 10 each for every four shares held.

Best and Crompton Engineering Ltd: Issue of 10½ per cent Rs. 75 lakh debentures af Rs 100 each at par as rights to the existing Indian resident equity shareholders, to be utilised for long-term working capital requirements.

Chloride India Ltd: 11 per cent right debentures of Rs 100 lakhs to the resident Indian shareholders for meeting working capital needs.

Jagatjit Industries Ltd.: Rights debentures of Rs 75 lakhs to the resident Indian shareholders for meeting working capital needs.

Shri Ambuja Petrochemicals Ltd.: Rs 199,20.500 in equity shares of Rs 10 each: to meet part finance for the project being set up in Medak District, Andhra Pradesh.

Licences and Letters of Intent

The following licences and letters of intent were issued under the Industrial (Development and Regulation) Act 1951 during the month of April, 1979. The list contains the names and addresses of the licensees, articles of manufacture, type of licences —New undertaking (NU), New article (NA), Substantial Expansion (SE), Carry on Business (COB), Shifting—and Annual Installed Capacity. Details regarding licences and letters of intent revoked, cancelled or surrendered are also given.

Licences Issued

Metallurgical Industries

M/s. Devidayal Rolling & Refineries Pvt. Ltd., Gupta Mills Estates, Ready Road, Bombay-400010.—Thane, Maharashtra—M.S. Rounds, Bars, Squares, Flats and Sections—3,800 tonnes (COB)

Electrical Equipment

M/s. Universal Cables Ltd., P. O. Birla Colony, Satna (M.P.) 485005—Satna, Madhya Pradesh—Power Capacitors—150 MVAR (addl.) 250 MVAR (SE)

M/s. International Computers Indian Manufacture Ltd. Magnet House, Narottam Morarji Marg, P.O. Box 516, Bombay 400001—Haveli, Poona Maharashtra—(1) 100 systems of Model No. 2904 over a five years period. (2) 100 nos. per year of card readers with a speed at least of 600 card per minute. (3) 100 nos per year of line printer with a speed at least 600 line per minute. (4) 200 nos. per year of magnetic tape transport (NA)

M/s. HMT Limited, 36, Cunningham Road, Bangalore-560052—Kutubullapur, Narasapur Road, Hyderabad, Andhra Pradesh—Fluorescent Tubes—4,000,000 nos. (NA)

Telecommunications

M/s. Gujarat Communications and Electronics Limited, Express Building, R. C. Dutt Road, Baroda-390005—Baroda Gujarat—Telephone Instruments—2,00,000 nos. (NU)

Transportation

M/s. Majestic Auto Ltd., C/48-51, Focal Point, Ludhiana-141010—Ludhiana Punjab—Bicycle Spokes & Nipples—4,00,000 gross nos. (COB)

M/s. Ralson Cycles Pvt. Ltd., Ralson Nagar, G. T. Road, Ludhiana-141003—Ludhiana Punjab—(1) Bicycle & rickshaw hubs—11,80,000 nos. (2) Brake Sets (front and rear) 100,000 sets. (3) Saddles—470,000 nos. (4) Bicycle handle parts—130,000 sets (COB)

M/s. Rockman Cycle Industries, 730, Industrial Area B, Ludhiana-141003—Ludhiana Punjab—Bicycle Chains—12,40,000 Nos. (COB)

M/s. T.C. Cycles Industries Pvt. Ltd., A-16, Industrial Estate, Ludhiana, Punjab—Ludhiana, Punjab—Bicycle Hubs—24,00,000 nos. Chain Wheel Crank assembly sets for bicycles—110,000 (COB)

M/s. India Pistons-Repco Limited, 202, Mount Road, Madras-600002—Kakkalur, Distt. Chingleput, Tamilnadu—Fly-Wheel Ring Gears—102,000 nos. (existing) 200,000 nos. (after expn.) (SE)

Miscellaneous Industries

M/s. Camlin Pvt. Ltd., J. B. Nagar, Andheri, Bombay-400059.—J.B. Nagar Andheri Bombay, Maharashtra—Office Gun Paste, Industrial adhesives based on starch, Gum Dextrine & Silicates, Synthetic adhesives-Rubber latex PF of PVA based—776,117 litres. (COB)

M/s. Bashimal Vinod Kumar, 132 Pradhan Building, S. V. Patel Road, Dongri, Bombay-400009—Nasik, Maharashtra—Industrial Machine Knives—Annual capacity on the basis of maximum utilisation of plant and machinery 88 tonnes (COB)

M/s. Meghdev Enterprises, 390/2, Opp. Dudhawali Pole, Gheekanta Road, Ahmedabad-38001—Tehsil Vadhawan, Distt. Surendra Nagar, Gujarat—(i) Industrial Laminates—700 tonnes. (ii) Decorative Laminates, sheets—500 tonnes. (NU)

Fertilisers

M/s. Indian Farmers Fertiliser Co-operative Limited, 34, Nehru Place, New Delhi-110019—Kandla District, Kutch, Gujarat—NPK Complex fertilisers (P_2O_5)—127,000 (existing capacity) 1 33,000 (cap. of expansion) 2,60,000 (after expn.) (SE)

Chemicals other than Fertilisers

M/s. Sulfur India Ltd., 3/189, Vishnupuri, Kanpur-208002 (UP)—Unnao, Uttar Pradesh—(a) Sulphuric Acid—66,000 tonnes (b) Ferric Alum.—35,000 tonnes (c) Alum. (Pure)—4,000 tonnes (d) Oleum—3,000 tonnes (e) Chlorosulphonic Acid—1,000 tonnes (f) Stablised Liquid Sulphur Trioxide—500 tonnes (NU)

M/s. Eastern Air Products Pvt. Ltd., 1 & 2, Industrial Estate, Govindpura, Bhopal-462023 (M. P.)—Bhopal, Madhya Pradesh—Dissolved Acetylene Gas—0.288 million cu. metres (addl.) 0.576 million cu. meters (after expn.) (SE)

M/s. Tuticorin Alkali Chemicals Ltd., 97, Mount Road, Guindy-Madras-600032—Mullakadu Village, Tuticorin Distt. Tirunelveli, Tamil Nadu—Soda Ash—66,66,000 tonnes. Ammonium Chloride—66,000 tonnes. (NU)

M/s. Karnataka State Industrial Investment and Development Corporation Limited, Harinivas, 36, Cunningham Road, Bangalore-560052—Hosahalli Village Munirabad Distt., Raichur Karnataka—HWM Viscose Staple Fibre—10,000 tonnes (NA)

M/s. Industrial Oxygen Company Pvt. Ltd., 31 (A), Vadgaon Sheti, Off Nagar Road, Poona-14 (Maharashtra)—Ahmedabad, Gujarat—Oxygen Gas—1.00 million cubic metres (NU)

M/s. Uni-Service Chemicals Pvt. Ltd., Nain Krupa, 4th Floor, 118/122, Kazi Sayed Street, Bombay-400003—Vapi Industrial Township, Vapi, Distt. Valsad, Gujarat—Sulphuric Acid 16,500 tonnes (with provision for manufacture of 10,000 tonnes per annum Oleum within this capacity) (NU)

M/s. Maize Products (A Division of Sayaji Mills Ltd.,) P. O. Kathwada-Maize Products, Ahmedabad-382430. Gujarat.—Tehsil Dascroi, Distt. Ahmedabad, Gujarat—Mannitol—150 tonnes (NA)

Drugs and Pharmaceuticals

M/s. Hindustan Antibiotics Ltd., Pimpri, Poona-411018—Pimpri, Poona, Maharashtra—(1) Capsules—103 lakh nos. (2) Vials—60 lakh nos. (3) Tablets—46lakh nos. (4) Syrup bottles —2 lakh nos. (NA)

Textiles

M/s. Mohan Carpets India Ltd., Administrative Officer, Prabhat Kiran (3rd Floor), 17, Rajindra Place New Delhi-11008. —KFTZ Gandhidham (Kutch) Gujarat—Ax-Minister woven woolen carpet—2,160 rolls of carpet of 100 sq. yards each.

Fermentation Industries

M/s. Kosang Cooperative Distillery Ltd., Gautamnagar, Post Kolpiwadi, Tal. Kopargaon, Distt. Ahmednagar, (Maharashtra) Country liquor—1,100 bulk kilo litres on provisinal bases (COB)

M/s. United Co-operative Distillery Ltd., Parite Distt. Kolhapur (Maharashtra)—Parite Distt. Kholapur, Maharashtra—Country liquor—1.976 bulk kilo litres (COB)

M/s. Terna Shetkari Sahakari Sakhar Karkhana Limited, Dhoki, P. O. Ternanagar, Tal. and Distt. Osmanabad, (Maharashtra)—Dhoki, Post Ternanagar, Taluk and Distt. Osmanabad, Maharashtra—Country liquor—1,100 bulk kilo litres on provisional basis (COB)

Vegetable Oils and Vanaspati

M/s. The Bhopal Sugar Industries Ltd., (Unit, Jagmanek Solvent Extraction Plant) Ganesh Temple Road, Sugar Factory Post Office, Sehore (MP)—Sehore, Madhya Pradesh—Vegetable oil by Solvent Extraction process—30,000 tonnes in terms of oil cakes or 19,500 tonnes in terms of rice bran (COB)

Leather & Leather Goods

M/s. Florind Shoes Pvt. Ltd., 26, Vepery High Road, Madras-600003.—Tehsil Vaniyambadi, Distt. North Arcot, Tamil Nadu—Leather Footwear—750.000 pairs (NU)

M/s. Wasan & Company, Post Box No. 42, Agra (UP)—Agra, Uttar Pradesh—Substanial Expansion—(1) Leather Footwear Uppers—3.25 lakh pairs 5 lakh Pairs (after expn.) New Article 2. Upper Leather—26.26 lakh square feet (SE)

Glue and Gelatin

M/s. Vishal Chemicals India Ltd., 78/3.Janpath.Second Floor New Delhi-110001.—Alwar, Rajasthan—Modified and Refined Guar Gum and Derivatives such as Oxidised Guar Gum, Carboxy-methylated Guar Gum. Hydroxalkylated Guar Gum and similar Carbohydrate modifications—2,700 m. tonnes (NU)

Letters of Intent

Metallurgical Industries

M/s. The Orissa Mining Corpn. Ltd., (A Govt. of Orissa Undertaking), Bhubaneswar-751009—Tehsil Anandpur, Distt. Keonjhar, Orissa—Ferrechrome (Charge Chrome)—50.000 tonnes (NU)

Mr. I. S. Gajra, 16/2, Race Course Road, Indore (MP)—Dewas, Madhya Pradesh—Forgings—9.000 tonnes (NU)

M/s. Patel Aluminium Pvt. Ltd., P. B. No. 90251, Patel Vanika, Western Express Highway, Goregaon (East),Bombay—Tehsil Goregaon, Distt. B. S. D., Maharastra—Copper Alloy Pipes, Tubes, Rods and other extruded and or drawn shapes and sections—1.500 tonnes (NA)

Electrical Equipment

M/s. Power Systems and Project Ltd., System House, Palghat 678007 Kerala State—Palghat, Kerala—Supervisory and Acquisition Control Systems (SACS), Boiler Automatic Control Systems (BACS) and Load Frequency Control Systems (LFCS)—25 Systems (NA)

M/s. Karnataka State Electronics Dev. Corpn. Ltd., 'Emilyn Haven', 30-Race Course Road, Bangalore-560001—Outside the standard urban area of Bangalore, Karnataka—Various types of Antennas including accessories (excluding those reserved for small-scale sector—310 nos. (NU)

M/s. Kamal Electronics and Engineering (P) Ltd., Khanpur, Post Sevasi, District Baroda (Gujarat)—Dry Fit GEL Cells/Batteries—40,000 nos. (NU)

Telecommunications

Mr. Jagdish Agarwal, 6, Ashakunj Society, Paldi, Ahmedabad-380007—Noida, Tehsil Sikandrabad, Distt. Bulandshahr, Uttar Pradesh—Telephone Dials—5.0 lakh nos. (NU)

Transportation

M/s. XLO India Ltd., 78-B, Dr. Annie Besant Road, Worli, Bombay-400018—Tehsil Vallabh Vidyanagar, Distt. Kaira, Gujarat—Hydraulic Brake Assembly Sets—100.000 sets (NU)

M/s. XLO India Ltd., 78-B Dr. Annie Besant Road, Worli, Bombay-400018.—Vallabh Vidyanagar, Distt. Kaira, Gujarat—1. Clutch Assembly Sets—80 000 nos. 2. Clutch Plates—2,00,000 nos. (NU)

M/s. Danfos India Ltd., 706-707, Surya Kiran, 19, Kasturba Gandhi Marg. New Delhi-110001.—Ghaziabad, Uttar Pradesh—Radiator Thermostat—1,09,000 nos. (addl.) 1,20,000 nos. (after expn). (SE)

Mr P.D. Rajgarhia, B-42 Maharani Bagh, Eastern Avenue, New Delhi-110065.—Tehsil Maerkotla, Distt. Sangrur, Punjab—Complete Paper Machines/including Pulping Equipment of 50 TPD size—3 nos. (NU)

Machine Tools

M/s. Gordon Woodroffe Engineers Ltd., 36, North Beach Road, Madras-600001.—Marai Malai Nagar, New Town, Tamil Nadu—Precision Machine Tool Accessories such as collets Collet holders, Reduction holders, Milling Cutter holders, Collet Closers, Collet Stoppers etc.—3,50 000 nos. 3,72,500 nos. (addl) (after expn.) (SE)

Mr Rasik Lal Motichand Kapadia, Diji House, 5th Floor, Raveline Street, Bombay-400001—Baraoda, Gujarat. 1. Portable Flame Cutting Machine—800 nos. 2. Coordinative Drive Flame Cutting Machines—60 nos. 3. Semi-Automatic Mig Welding Equipment—100 nos. 4. Mig Torches—600 nos. 5. Welding and Cutting Torches—5'000 nos.—**ACCESRORIES**—6. Regulators 9,000 nos. 7. Cutting Machine Torches 3,000 nos. 8. Nozzles—50,000 nos. (NU)

Fertilisers

M/s. Dalmia Dairy Industries Limtted, 11. ABC, Atmaram House 1. Tolstoy Marg, New Delhi-110001.—Tehsil Rewari, Distt. Mohindergarh, Haryana—Single Superphosphate—66,000 tonnes per annum, Sulphuric Acid 33,000 tonnes per annum (NU).

Mr K.K. Maheshwari, Maheshwari House. 36, L. Jogmohandas Marg. Bombay-400036,—Tehsil Tarapur, Distt. Thana Maharashtra—Sulphuric Acid—33,000 tonnes. (NU)

M/s. Bharat Alums and Chemicals Ltd., M.C.D. Building, D.B. Gupta Road, New Delhi-55.—Alwar, Rajasthan—Sulphuric

Acid—23,100 tonnes (additional) 39,600 tonnes (after expn.) (SE)

M/s. Madhuvan Chemical and Fertilizers Private Ltd., Jeevan Raksha Bhavan, Delhi Gate, Udaipur-313001.—Tehsil Mavil, Udaipur—Udaipur Rajasthan—1. Single Super Phosphate—66,000 tonnes—2. Sulphuric Acid 33,000 tonnes (NU)

Mr Ajeet N. Barshikar, Central Bank Road, Ahmednagar-414001.—Amedanagar, Maharashtra—(i) Oxygen Gas—1.00 million cu. mts. (ii) D.A. Gas 0.20 million cu. mts. (NU)

M/s. Punjab Sulphur Products Ltd., 526, Sector 16, Chandigarh—Tehsil Balachaur, Distt. Hoshiarpur, Punjab—1. Single Super Phosphate—66,000 tonnes. 2. Sulphuric Acid 33 000 tonnes (after expn.) (SE)

Dyestuffs

Mr Parashant P. Bhuta, 4007, Astodia Road, Ahmedabad, —Kandla Free Trade Zone—Direct Black E, Direct Brown NR, Direct Green B, Direct Fast Red F, Chrome Orange G, Chrome Brown 2 R, Chrome Lemon Yellow, Menthol Oil 1, Orilan Black WA, Direct Fast Oraage SE, Acid Dyes other Chrome Dyes Direct Dyes—250 M.T. (NU)

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Cement and Gypsum Products

M/s. Birla Jute Manufacturing Co. Ltd., Birle Building, 9/1, R.N. Mukherjee Road, Calcutta.—Tehsil-Raghuraj Nagar, Distt. Satna Madhya Pradesh—Portland Cemant—13.81 lakhs tonnes (after expansion) (SE)

M/s. Industrial Development Corporation of Orissa Ltd., Post Box No. 78 Bhubanaeswar—Bargarh, Distt. Sambalpur, Orissa.—Cement—1.30,000 tonnes (additional) 5,30,000 tonnes (after expansion) (SE)

Licences Cancelled or Revoked

Information pertains to particular licences only

M/s. [Kulko Engg. Works Ltd., Poona—Maharashtra—Internal Combustion Engines—Cancelled

M/s. Devidayal (Sales) Pvt. Ltd.. Bombay.—Maharashtra—Dimethoate Technical—Revoked

M/s. S&H Industrial Corporation, New Delhi,—Karnataka —H.T. Machine Screws—Revoked.

M/S Jagatjit Cotton Textile Mills Ltd., New Delhi—Rajasthan—Cotton Cloth—Cancelled.

Sree Akkamamba Textiles Ltd., Tanuku—Andhra Pradesh—Cotton Textiles—Revoked.

M/s. Madurai District Cooperative Spinning Mills, Madurai (Tamil Nadu)—Tamil Nadu—Cotton Yarn—Revoked.

Sree Saraswathi Mills Ltd., Madurai (Tamil Nadu)— Tamil Nadu—Cotton Textile—Revoked.

M/s. Mohini Mills Limited Calcutta—West Bengal—Cotton Textiles—Revoked.

M/s. Madhya Pradesh State Textile Corporation Ltd, Bhopal —Madhya Pradesh—Cotton Yarn/Textiles—Revoked.

M/s. Manindra Mills, Cossimbazar (West Bengal) (Under the management of National Textile Corporation Ltd.) New Delhi—West Bengal—Cotton Textiles— Revoked.

M/s. Prakash Cotton Mills Pvt. Ltd., Bombay, Maharashtra—Cotton/Textiles—Revoked.

M/s. Hada Textile Industries Ltd., Calcutta—West Bengal—Cotton Yarn—Revoked.

M/s. Bangodaya Cotton Mills Ltd. Calcutta—West Bengal—Cotton Yarn—Revoked.

M/s. Associated Textile Engineers Bombay,—Gujarat—Automatic system for Bale handing equipments—Cancelled.

Letters of Intent Lapsed or Cancelled

(Information pertains to particular letters of intent only)

M/s. Assam Industrial Development Corporation Ltd., Assam.—Malamine—Lapsed.

M/s. TIDCO Ltd. Madras.—Tamil Nadu—Fishing Vessels. —Lapsed.

Mr Govind Ram Gupta, New Delhi—Delhi—Industrial Gases —Cancelled.

M/s. Saroj Alloys and Steel Ltd., Nagpur (Maharashtra)—Karnataka—Steel Rerolled Products—Lapsed.

M/s. Muraka Cables & Conductors Ltd.: Cochin—Gujarat —AAC &ACSR overhead Conductors—Cancelled.

M/s. Allied Spinners,—New Dehli—Uttar Pradesh—Shoddy Yarn—Lapsed.

M/s. Bombay Woollen Mills Ltd., Bombay.—Maharashtra—Worsted spindles and powerlooms—Cancelled.

M/s. East Anglia Plastics (I) Ltd., Calcutta—Maharashtra—Dimethlyl Formamide—Lapsed.

Finances of large public limited companies–1977-78

The salient features of the overall performance of 415 selected large non-government, non-financial public limited companies (each with a paid-up capital of one crore rupees or above) during the year 1977-78, as revealed by a study prepared by the division of Company Finances of the department of Statistics (RBI), are highlighted below:

THE UPTREND in sales, value of production and pre-tax profits was maintained, but the growth in these indicators was at a slower pace than in 1976-77. On the other hand, the rates of assets formation, fixed assets formation and capital formation (both gross and net) were higher. A reversal of the declining trend in the rate of inventory accumulation observed in the previous year and an increase in debt as percentage of equity were the other features of the performance of the companies during the year.

The value of production and sales stood at Rs 11,297 crores and Rs 11,264 crores, respectively, recording increases of 8.2 per cent and 8.1 per cent, as compared with the growth rates of 10.4 per cent and 12.7 per cent in the previous year. The increase in the stock of finished goods and work-in-progress was Rs 34 crores, against Rs 20 crores. The rate of growth in expenditure excluding interest (8.7 per cent) was higher than that in total income excluding non-operating surplus (8.3 per cent). All the main heads of expenditure contributed to the rise in total expenditure from Rs 9,648 crores to Rs 10,488 crores. Manufacturing expenses (comprising expenses on raw materials, components, etc, stores and spares, power and fuel, royalty and other manufacturing expenses) were higher by 8.3 per cent at Rs 567 crores; they accounted for 70.2 per cent of total expenditure. The wage bill (comprising salaries, wages and bonus, provident fund and employees' welfare expenses) were up by 10.0 per cent at Rs 141 crores and accounted for 14.8 per cent of total expenditure. The remaining expenses, contributing a share of 15.0 per cent, recorded an increase of 9.2 per cent (Rs 133 crores).

Growth Rate Declines

Consequent on the rate of growth in total expenditure being higher than in total income, the growth rate in gross profits declined sharply from 10.2 per cent to 4.1 per cent; gross profits in 1977-78 stood at Rs 1,094 crores against Rs 1,044 crores in 1976-77. The bulk of the increase in gross profits (Rs 35 crores out of Rs 50 crores) was absorbed by interest payment and, as a result, operating profits at Rs 689 crores recorded a rise of only 2.4 per cent (Rs 16 crores). However, with non-operating surplus also recording an increase of Rs 16 crores, pre-tax profits were up by 4.6 per cent at Rs 733 crores (Rs 701 crores in 1976-77). The growth rate in pre-tax profits was, however, lower than that (5.5 per cent) recorded in 1976-77.

Tax provision absorbed only one-third of the increase in pre-tax profits and, in consequence, profits after tax recorded a growth of 6.6 per cent, which was higher than that (4.8 per cent) in the previous year. The bulk of the increase in after-tax profits was, however, diverted for payment of dividends which rose from Rs 177 crores to Rs 190 crores. Profits ploughed back into business increased by 5.3 per cent from Rs 144 crores to Rs 152 crores.

The share of manufacturing expenses in the value of production increased marginally from 65.1 per cent to 65.2 per cent. The share of remuneration to employees and of other expenses also increased marginally, the former from 13.5 per cent to 13.7 per cent and the latter from 8.5 per cent to 8.6 per cent. With the increase in the shares of these items the share of operating surplus (adjusted for other income) in the total value of production declined from 4.0 per cent to 3.6 per cent. Thus, the declining trend in the share of operating surplus observed in respect of these companies in 1976-77 continued during the year under review.

Interest absorbed 3.6 per cent of value of production in both 1976-77 and 1977-78, although the ratio of interest paid during the year to the average of outstanding borrowings at the beginning and at the end of the year, which may be taken as a rough estimate of the averave cost of borrowings, was marginally higher at 12.6 per cent, against 12.4 per cent. Depreciation and repairs to buildings and machinery absorbed 3.3 per cent and 2.0 per cent, respectively, of the value of production.

Profitability Ratios

The profitability ratios witnessed marginal declines from the levels recorded in 1976-77. The ratio of gross profits to total net assets declined from 11.6 per cent to 11.3 per cent, while the margin on sales (gross profits as percentage of sales), declined from 10.0 per cent to 9.7 per cent and the return on shareholders' equity (profits after tax as percentage of net worth) from 9.8 per cent to 9.7 per cent.

Gross assets formation amounted to Rs 1,015 crores (Rs 882 crores in 1976-77), the rate of gross assets formation being 8.4 per cent, against 7.9 per cent. The bulk (62.1 per cent) of the assets formation was in the shape of fixed assets. Fixed assets formation, gross and net, were Rs 630 crores and Rs 303 crores, respectively. The rates of fixed assets formation, gross and net, were 3.5 per cent and 8.6 per cent, against 8.4 per cent and 6.1 per cent, respectively. The low rate of growth in inventory pulled down the rates of capital formation, gross and net to 8.1 per cent and 6.9 per cent. These rates were, however, higher than in the previous year (6.0 per cent and 3.6 per cent). In absolute terms, capital formation, gross and net, amounted to Rs 765 crores and Rs 438 crores, respectively, against Rs 531 crores and Rs 218 crores.

The year under review witnessed a reversal of the declining trend in the rate of growth in inventory. There was on overall increase of 4.8 per cent in inventory, as against a marginal increase of 0.7 per cent. Inventory accumulation took place mostly in the form of raw materials, components, etc, the stock of these having increased by 6.5 per cent over the year. The growth in inventory being proportionately less than that in sales and consumption, the inventory ratios declined during the year. Thus the holdings of raw materials, components, etc were just two months' consumption requirements, as compared with 2.1 months' consumption requirements in 1976-77, while inventory of finished goods equalled four weeks' sales, as against 4.4 weeks' sales.

Short-term bank borrowings increased by 5.0 per cent, against 7.0 per cent. There was only a marginal increase in the ratio of short-term bank borrowings to inventories from 50.2 per cent to 50.3 per cent.

External sources contributed Rs 530 crores and ffnanced slightly more than half the total assets formation (52 per cent). Trade dues and other current liabilities constituted the most important source of external funds and provided Rs 263 crores (49.6 per cent of the external funds). Borrowings, which had been the main source of external funds in the preceding year, ranked next but very closely, with a contribution of Rs 242 crores accounting for 45.7 per cent of the total external funds. The role of bank borrowings as a source of external funds declined steeply from 26.5 per cent to 15.7 per cent. Among internal sources (Rs 485 crores) depreciation provision provided the bulk, contributing Rs 327 crores, against Rs 313 crores.

With sundry creditors at Rs 1,614 crores as at the end of 1977-78 (Rs 1,451 crores in 1976-77), as against sundry debtors at Rs 1,441 crores (Rs 1,343 crores for 1976-77), the selected companies continued to be net absorbers of trade credit in the year under review.

The ratio of current assets to current liabilities declined fractionally from 1.30 to 1.28. Debt as percentage of equity

Performance of 415 Large Public Limited Companies

(Amounts in crores of Rs)

				Annual growth rate (Percentage)	
	1975-76	1976-77	1977-78	1976-77	1977-78
Value of production	9,460	10,440	11,297	10.4	8.2
Sales@	9,248	10,419	11,264	12.7	8.1
Gross profits	947	1,044	1,094	10.2	4.8
Operating profits	617	673	689	9.0	2.4
Profits before tax	665	701	733	5.5	4.6
Tax provision	358	380	391	6.1	2.9
Profits after tax	306	321	342	4.8	6.6
Dividend	157	177	190	12.8	7.6
Profits retained	149	144	152	—3.6	5.3
Gross fixed assets	6,112	6,646	7,339	8.4*	9.5*
Net fixed assets	3,289	3,507	3,870	6.1*	8.6*
Inventories	2,813	2,832	2,967	0.7	4.8
Work-in-progress and finished goods	1,344	1,365	1.397	1.5	2.4
Gross capital formation*		531	765	6.0	8.1
Increase in inventories		18	135	0.7	4.8
Net capital formation*		218	438	3.6	6.9
Total assets formation*		882	1,015	7.9	8.4
External sources		442	530		
Of which:					
Bank borrowings		117	83		
Profits retained as percentage of:					
Profits before tax	22.5	20.5	20.7		
Profits after tax	48.8	44.9	44.3		
Gross profits as percentage of:					
Total net assets	11.3	11.6	11.3		
Sales	10.2	10.0	9.7		
Profit after tax as percentage of net worth	9.9	9.8	9.7		

@ Net of rebates and discounts and excise duty and cess.

* Adjusted for revaluation due to devaluation/revaluation of foreign currencies etc.

maintained an uptrend from 45.3 per cent in 1975-76 to 46.6 per cent in 1976-77 and further to 48.2 per cent in 1977-78.

Good Performance

Judged by the growth rates in sales, value of production, gross profits, operating profits and pre-tax profits, companies in cement, cotton textiles, chemicals, electricity generation and supply, and paper and paper products turned in a good performance. Companies in paper and paper products, which had reported declines in sales, value of production and profits in the previous year, showed increases in these indicators in 1977-78. On the other hand, companies in aluminium and silk and rayon textiles which had done well in the previous year did not maintain this record. While aluminium companies recorded declines in sales, value of production and profits, silk and rayon textiles companies reported considerably lower rates of growth in sales, value of production and decline in profits.

Shipping companies fared badly and reported low growth rates in sales and value of production which were even lower than those in the preceding year when they were below three per cent. Their gross profits declined and they ended the year with a deficit after tax payments despite a substantial non-operating surplus. Companies in rubber and rubber products industry reported an operating loss of Rs 40 lakhs. The non-operating surplus helped the companies to wipe off the operating loss and earn a small amount pre-tax profits (Rs 1.4 crores). Engineering companies registered poor growth rates in sales, value of production, gross profits, operating and pre-tax profits.

Companies belonging to tobacco, cotton textiles, engineering, chemicals, cement and paper and paper products industries had larger post-tax profits than in the previous year. The increase in post-tax profits was accompanied by an increase in dividend distribution in all these cases. The engineering companies siphoned off as much as Rs 4.6 crores out of the Rs 5.2 crores increase in their post-tax profits for increasing dividend payments. Profits retained in business by them registered an increase of less than rupees one crore, as compared to an increase of Rs 23 crores in the previous year. In the case of cotton textile companies, the dividend was more than the after-tax profits and there was a withdrawal of nearly Rs 10 crores from reserves. Companies in cement and paper and paper products, which had to dip into reserves in 1976-77, were able to plough back Rs 2.5 crores and Rs 1.6 crores, respectively, despite higher dividend declaration.

Companies belonging to sugar, silk and rayon textiles and electricity generation and supply reported lower post-tax profits while companies in aluminium, rubber and rubber products and shipping had deficit after tax payments. Despite the lower after-tax profits, silk and rayon textiles companies hiked their dividends, while electricity generation and supply companies maintained dividend at the previous year's levels. In other cases, dividend was pruned. The slashing of dividend was, however, substantial only in the case of rubber and rubber products companies.

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Through the eyes of a child

If there weren't any medicines
The doctors would be helpless
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and all the big hospitals.
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To make the pain go?

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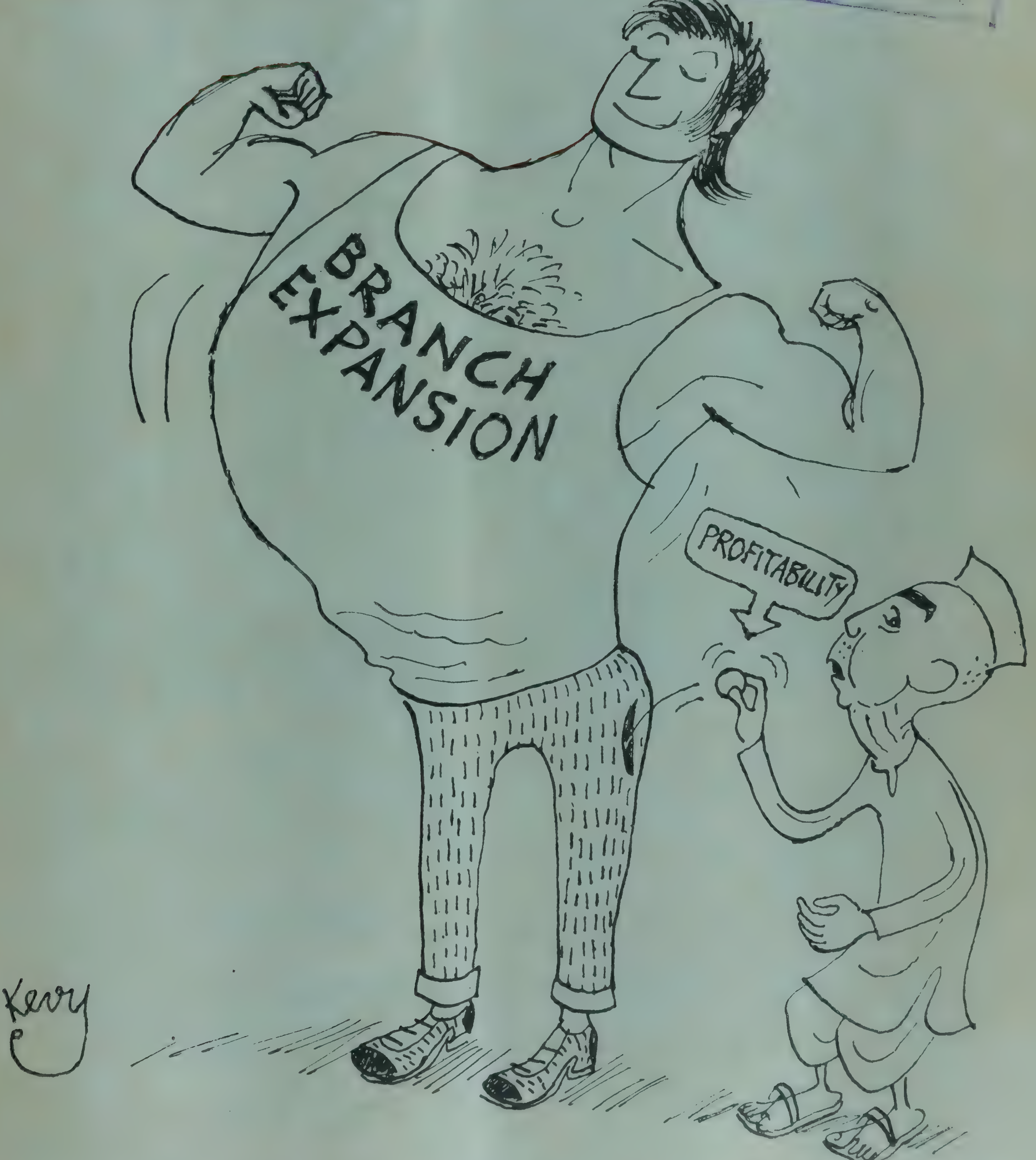
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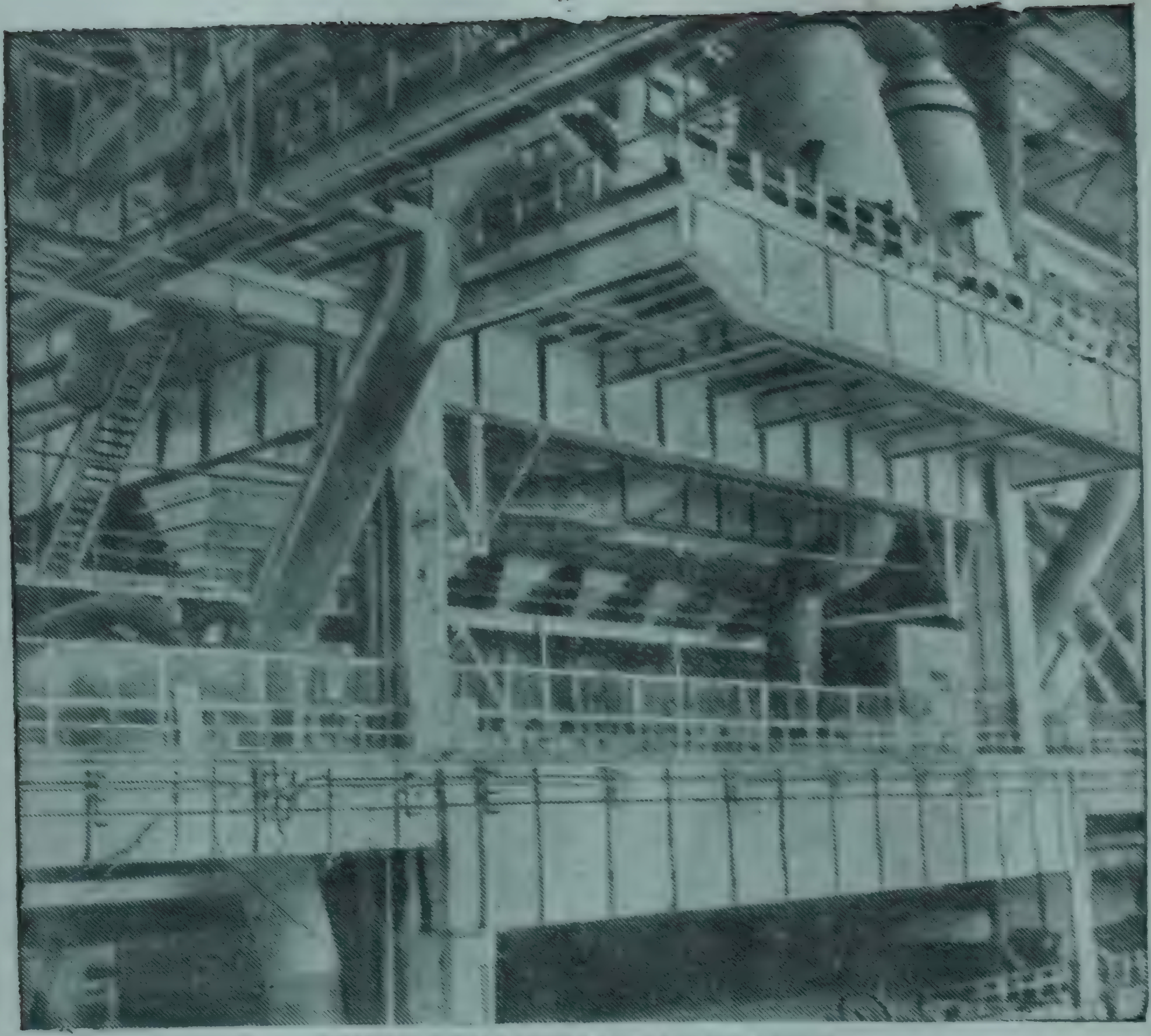

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NT-1-79

Shadows over sixth plan

A MEETING of the full Planning Commission held last week under the chairmanship of the prime minister, Mr Morarji Desai, has cleared the decks for the preparation of the final draft of the sixth Plan, covering the five-year period to 1982-83. It authorised that the final draft should be drawn up on the basis of the 1978-79 price level, which, according to the recent estimates, would involve the outlay on the programmes included in the public sector being stepped up by Rs 2,000 crores from the draft Plan figure of Rs 69,380 crores. The deputy prime minister (Finance), Mr Charan Singh, had suggested that instead of increasing, the public sector outlay should be scaled down by about Rs 4,000 crores as, besides the increase in project costs owing to the price escalation last year, the non-Plan expenditure also had tended to go up significantly.

Mr Charan Singh is understood to have gone along with his colleagues in the Planning Commission on one condition which is that they would not stand in the way of a fairly steep increase in the prices of petroleum products and coal. The Finance minister has been stressing that these prices have to be raised following the hike effected by the Organisation of Petroleum Exporting Countries (OPEC) in the prices of crude oil and the continued losses of the coal industry, which are bound to grow substantially following the recent wage settlement in the industry. The additional burden of oil imports this year has now been estimated around Rs 1,100 crores. The losses of Coal India are expected to grow to around Rs 300 crores.

The deputy prime minister (F) is said to have emphasized at the Planning Commission's meeting that the central exchequer could not bear this heavy burden if deficit financing was to be contained. The Planning Commission had been advocating only a moderate increase in prices, particularly of petroleum products, in the interest of containing fuel costs. It apparently has resiled from this position in a gesture of *quid pro quo* to the resilience shown by Mr Charan Singh in his stand on the public sector outlay during the five years of the current Plan.

The Planning Commission is currently engaged in a fresh review of the resources position of the central as well as the state governments, which task it has been asked to complete in about a fortnight so that the revised estimates can be incorporated in the final draft to be presented to the National Development Council at its next meeting in the coming few weeks. While making a plea for increasing the public sector outlay, the Planning Commission, however, has emphasised the need for ensuring greater efficiency of resource utilisation, especially in the irrigation, power and fertiliser sectors, which account for a major portion of the public sector outlay.

The up-dating of the Plan on the basis of the 1978-79 price level, indeed, is a heartening development. It will realign expenditure at least to some extent to the inflation that took place last year. But since the inflationary tendencies continue unabated—in fact, they have got accentuated during the past 3½ months—and the situation may not improve for quite some time owing to the global energy crisis, one may ask: will it not be more appropriate if some allowance is made in the finalising of the Plan for the currently developing serious situation as well? This may pose some difficulties. But, surely, if planning has to be realistic, the current situation cannot be completely ignored.

It remains to be seen how the Planning Commission will be able to ensure additional resources for an enlarged Plan, even though the increase in outlay on the basis of the 1978-79 prices might not be very large, as the above estimate shows. No doubt, the central revenues are maintaining their buoyancy. But since the share of the states in the overall Plan has been increased not insignificantly, the success of the Plan will depend to a large extent on the resource mobilisation efforts of the states. According to the Planning Commission's own admission, the states have not been pulling their weight; they have failed to generate last year as well as this year the resources expected of them. On the other hand, their resources position has come under serious strain owing to the increase in their non-Plan expenditure as a result of the concessions they have been obliged to make to their employees, including those belonging to the police force.

demands galore

The states obviously cannot draw upon the resources of the centre to any larger extent on some pretext or the other. Notwithstanding the current buoyancy in revenues, the central finances also are coming under strain on account of the concessions granted to its employees and the wage revisions in the central government undertakings—which would erode their profitability if production is not stepped up through increases in productivity or the prices of their products are not realigned judiciously. Then, the demand for bonus for railwaymen, which, if acceded to, is bound to raise similar pleas from the post and telegraph employees and those manning the defence undertakings—and ultimately from all the government employees—is yet to be decided. The increase in fuel costs resulting from the escalation in the prices of petroleum products and coal too will add to inflationary tendencies which may necessitate upward revision in the dearness allowance of employees.

In fact, one wonders if the government can allow any further protection to the wages of its employees as well as those of the public sector undertakings and the other organised sectors of the economy from the inflationary trends. This issue has assumed heightened significance in view of the fact that if substantial protection is granted through increasing deficit financing, the remedy will be worse than the malady. Deficit financing undoubtedly acts more rigorously against the interests of the vulnerable sections of society which do not have any bargaining power.

A similar situation has developed in Britain also where, it appears, second thoughts are being bestowed on ensuring protection to workers against erosion in their wages. Trade unions in Britain and India, especially the militant ones, are no different. Opinion, reports suggest, is veering round in Britain to the effect that the energy crisis should call for equal sacrifices from all. This implies that protection to the organised sectors of the work force cannot be ensured at the expense of the interests of others.

In India, the organised sector is just a small percentage of the total population. The national interests obviously cannot be sacrificed by catering for the interests of this small percentage alone. The trade unionists in the country will do well to recognise the realities of the situation. They have to moderate their claims in the long-term interests of the country and help in breaking the vicious circle of wages chasing prices and prices chasing production costs in the escalation of which the contribution of the wage-structure in the organised sectors in not small. Trade unions admittedly have an obligation to their membership. But healthy trade unionism has an obligation to the nation as well. The inter-union rivalries, which abound in this country, have only complicated matters. Restraint on workers' wages, of course, simultaneously calls for disciplining of the unscrupulous among the trade and industry.

realistic appraisal

The above should suggest that the current Plan needs to be drawn up with eyes open not only to the developing situation on the price front but also to the efforts the politicians at the helm of affairs in the states make to live up to their commitments at resource mobilisation. Otherwise, grandiose planning, which in itself will contribute in no small measure to the uptrend in prices in the short run, will serve no porpose. It will remain on paper and lags in implementation will be wide. Instead of rectifying the situation, this may inject new distortions.

The development needs of the economy unquestionably are pressing. But there has to be close co-relation between the development Plans and the resources available. The experience of the 1960s, after the Chinese invasion, should be a clear indication of the fact that in the absence of a close co-relation between the resources available and the programmes to be undertaken, it will not be possible to contain the price level. And if the price level cannot be contained, planning will go awry. In fact, the very concept of rolling plan warrants adequate adjustments to be made in the Plan programmes in the light of the developing situation.

Destabilising the centre

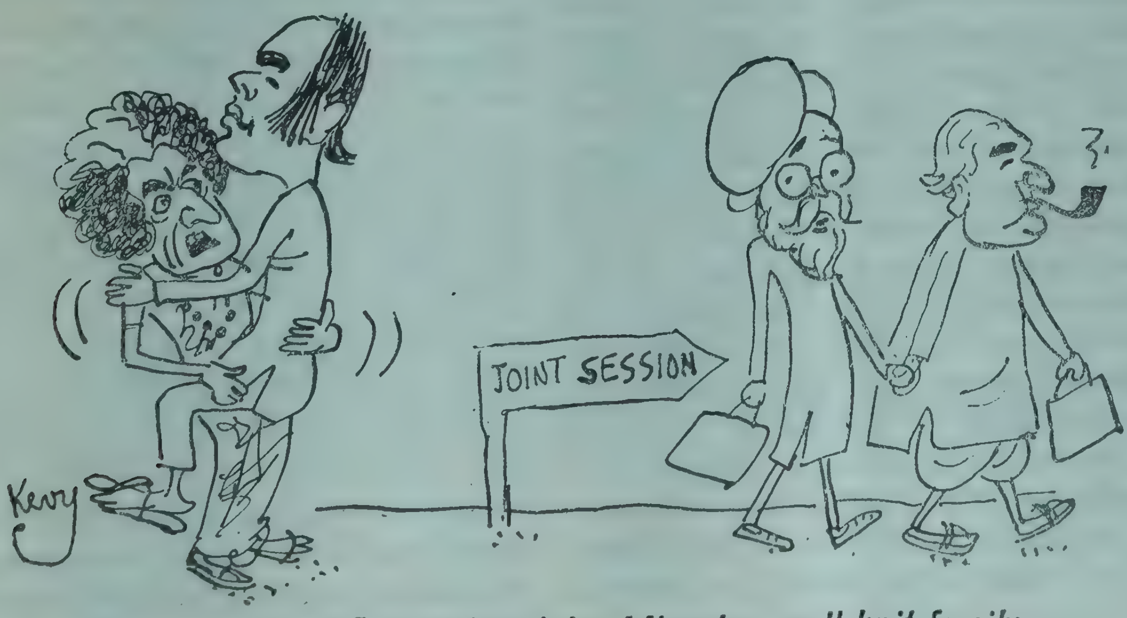
WITH Mr Y.B. Chavan (Congress-S) redesignated as the leader of the opposition in Lok Sabha on the second day of its assembling for the current monsoon session and Mr Raj Narain forming a separate group of 32 (styled as Janata-Secular), the process of re-alignment of the political forces in the country, which got initiated at the Bangalore convention of congressmen called by the state chief minister, Mr Devraj Urs, appears to be gathering momentum. It is too early to say whether it will result in the toppling of the present Janata government at the centre. A censure motion against Mr Morarji Desai's cabinet has been brought before the House by Mr Chavan. The Congress(I) and the CPI have already lent support to it; so also the Raj Narain group. But still at the time of writing, Mr Desai enjoys a marginal supremacy, although the Janata party itself has been reduced to minority, its strength in Lok Sabha being 266 out of an effective membership of 538. (The total strength is 544, including the Speaker. Five seats are vacant at present.) The Janata has two allies—the nine-member Akali Dal and the 22-member CPI(M). Six members of the Peasants and Workers Party and some others from amongst the independent members may also go with the ruling party. Approaches have been made to the 18-member AIADMK group as well for support to Mr Desai. This may help him to weather the storm. But nothing can be predicted as still four days have to go before voting on the move takes place on Monday after a 15-hour debate.

The strength of the Congress(S) in the Lower House has gone up to 77 with the supporters of the Karnataka chief minister switching their loyalties to it from Mrs Gandhi's faction of the Congress and two Janata members joining its ranks. The strength of the Congress(I) has been reduced to 69. The Janata party's strength has gone down to 266 as a result of the above two defections and 32 members forming Mr Raj Narain's group. The CPI has seven members in this house, the RSP four, the Forward Bloc three, the Muslim League, the Jammu and Kashmir National Conference, the Kerala Congress and the Republican Party of India (Khobragade group) two each. There are 17 unattached members. There is a possibility of some more members from the Janata belonging to the BLD faction leaving the party and ultimately the deputy prime minister (Finance), Mr Charan Singn, following suit. But there is no certainty about it even though Mr Charan Singh has told the prime minister that he would be guided by his followers and would do whatever they want him to do. It remains to be seen whether he will intervene in the debate on the censure move to defend the government. His indecision in this regard, of course, is being interpreted as his likely exit from the party soon.

Mr Raj Narain and some of his colleagues have taken their struggle against the RSS, with which they equate the Jana Sangh, to the point of no return. They are demanding that either Mr Desai should part company with the RSS-Jana Sangh group (on whose support he primarily depends at present) or quit. The convention called last week by the Industry minister, Mr George Fernandes, of his erstwhile socialist friends and some other like-minded persons too was directed primarily against the Jana Sangh, although ostensibly it was claimed to be an attempt at mobilising opinion for pressurising the government to take a socialist stance.

It is rather unfortunate that the above developments, which were expected to take place a few months before the next parliamentary elections in 1982, have unfolded themselves just after about 28 months of the Janata party coming into power. The bickerings in the Janata party, of course, have been going on for nearly a year now. They have had a very adverse impact on its functioning and have tarnished the image of the present government perhaps beyond repair. It appears that the politicians in this country have forgotten the lessons of 1967 general election so soon and have no hesitation in destabilising the political situation which cannot but have serious consequences.

There are reports that if the Jana Sangh group, which has a membership of about 90, can be dropped by Mr Desai, the Congress(S) could fill in the gap by supporting it from outside. But is there any guarantee that such a realignment will impart stability to the government ? Even with the Jana Sangh group out, in which case the Raj Narain group and the other BLD members, who probably are sitting on the fence, will again support Mr Desai, the internal squabbles of the reorganised Janata party apparently are not expected to end.



Your congress is a hotch-potch. Mine is a well-knit family.

Engineering exports without steel ?

THE COMMERCE minister, Mr Mohan Dharia, announced recently that the government of India had set up a committee under the chairmanship of Mr Prakash Tandon, Director-General of the National Council of Applied Economic Research, to recommend the export strategy to be followed during the eighties. There is no doubt that the committee will produce a competent and comprehensive report. But it is difficult to say at present how far it will be of practical use to our industries in undertaking their export programme with confidence and on a long-term basis.

Engineering goods are considered to be the most dynamic sector of our export trade. But the exporters of these products have been facing considerable anxiety and uncertainty mainly because of the utter lack of coordination among the different ministries of the central government. The chairman of the Engineering Export Promotion Council, Mr Suresh Mehta, said in Calcutta on July 3 that the exports had sharply fallen in the first quarter of 1979 due to the non-availability of steel for export fabrication. He complained that though the minister of Steel, Mr Biju Patnaik, had assured that the government would give top priority to the supply of steel for export, this promise had not been implemented. Mr Mehta said that the council would take up this matter with the prime minister, Mr Morarji Desai, who had been kept informed of the nature of the constraints faced by the exporters of engineering goods.

The fact that the prime minister's

intervention had to be sought to ensure the supply of steel to the exporters of engineering goods provides a glaring instance of the lack of seriousness on the part of the ministries concerned in giving timely attention to the problem of export promotion. Should not Udyog Bhavan accord greater urgency and importance to tackle the problems that exporters are facing at present rather than concentrate on a long-term strategy for export promotion ? Not that the latter is not important, but the government cannot hope to inspire confidence among exporters if it continues to show indifference to their present hardship.

Mr Mehta stressed that if the supply of steel was not stepped up to the fabricators, engineering exports this year might fall below the last year's figure of Rs 690 crores. The target for 1979-80 is Rs 850 crores. The council had earlier projected the requirements of various categories of steel and pig iron for achieving the target. The ministry of Steel should see to it that the exporters' needs are given top priority. There are many impediments over which exporters have little control, such as inadequacy of shipping space and excessive freight rates. It will indeed be unfortunate if these difficulties become intensified because of the inability of the authorities concerned to provide sufficient supply of raw materials.

need for initiative

Among the export promotion bodies, the Engineering Export Promotion Council is one of the best organised. But it seems that even it has not been able to influence the government's decisions favourably on many crucial issues. Unless the government is receptive to the council's suggestions and recommendations, it will be unable to play its role effectively in increasing and diversifying exports. At the same time, the council should show greater interest and initiative in promoting exports especially to the countries in our neighbourhood. For instance, is the council giving proper attention to the market in Bangladesh ? Dacca's import policy for 1979-80, announced a few days ago, provides for the merchandise imports of Taka 1,850 crores which might be raised to Taka 2,000 crores, if necessary. The council should examine to what extent Dacca's import policy offers scope for the export of our engineering goods.

It was recently reported that in Pakistan there was a large and increasing demand for Indian goods because of their competitive prices. Examples of such goods are bicycles, scooters, commercial vehicles, radios, steel tubes and elevators. For instance, an Italian or Japanese scooter is being sold in Pakistan for Rs 12,000 compared to the Indian scooter priced at Rs 6,000. Similarly, while an Indian bicycle can be sold at Rs 250, bicycles from other countries cost between Rs 500 and Rs 600. The council, therefore, should take greater interest in the markets at our doorstep.

Fostering project exports

The envisaged introduction of two new schemes by the Export Credit Guarantee Corporation (ECGC), one to provide cover against exchange fluctuations at the stage of bidding for contracts overseas and the other concerning the deferred receivables, including construction contracts, service contracts, turn-key projects and buyers' lines of credit, should go a long way in assisting international tendering by Indian entrepreneurs and undertakings for the above types of projects and also foster exports of capital goods. Last year the ECGC took another important step with the same end in view when it introduced the overseas investment insurance to provide protection to not only the original capital investments overseas but also to the retained earnings and dividends actually repatriable to India. Under the new schemes, cover will be available for periods from 12 months to 20 years. They will be operated in relation to six major foreign currencies. They will mark a substantial improvement over a scheme already operated by the Reserve Bank in this regard which has not proved to be of much use, because of its restrictive nature.

Disclosing the above at a press conference here last week, the chairman of the ECGC, Mr D. Sathe, also revealed that his undertaking would shortly formulate another scheme which would provide insurance protection to exporters against unfair calling of performance bonds. Two other schemes introduced last year—the whole turnover post-shipment export credit guarantee and the special scheme for small-scale exporters—he observed, were making good progress. Mr Sathe asserted that the range and the scope of the policies and the services rendered by the ECGC were quite comprehensive and even pioneering in some areas such as the whole turnover packaging credit, post-shipment guarantee and small-scale exporters' programme.

As a result of the introduction of two new schemes this year as well as the encouraging response which Indian bidders are receiving in some of the overseas countries, project exports, Mr Sathe felt, should go up by the next year to as much as Rs 2,000 crores. Last year, they were valued at Rs 700 crores—Rs 150 crores more than the exports in 1977. The remittances into the country from overseas projects, he added, could go up to Rs 500 crores per annum in the near future.

higher growth rate

Referring to the overall performance of the ECGC, Mr Sathe observed that it had registered a higher growth rate of 27 per cent during 1978, against 10 per cent in 1977. The business transacted by the corporation last year touched the Rs 4,000-crore mark—an increase of Rs 721 crores over the previous year. The value of shipments covered under the ECGC's insurance policies, including the special schemes, amounted to Rs 807 crores and the bank advances to Rs 3,342 crores—an increase of six and 33 pe cent, respectively, over the previous year.

During 1978, the ECGC, Mr Sathe added, covered 64 contracts with a total maximum liability of Rs 187 crores. In the process of extension of its services, it brought over 1,500 new exporters on its roll during the year. The total number of exporters holding policies grew to over 5,200.

Shipments of the value of Rs 781 crores by policy-holders of the ECGC to some 150 countries were covered under its insurance policies. Gross claims paid by it in 1978 amounted to Rs 5.55 crores, the highest paid since its inception. Substantial transfer claims, representing about 87 per cent of the claims under insurance policies, had to be paid on account of payment delays from such countries as Zambia, Nigeria, the Sudan, Ghana, Turkey and Syria.

Ambitious auto plans

THE AUTOMOBILE and ancillary industries are developing on ambitious lines, rather ironically at a time when prices for petroleum products are soring. However, the growth in demand for commercial vehicles, three-wheelers, two-wheelers and tractors is bound to be in evidence in this country of vast distances and a huge population. The expansion and new schemes are many involving heavy capital outlay and the pre-eminence of the southern region will be retained in the coming years. Indeed Tamil Nadu and Karnataka may become even more important than hitherto when new projects take shape. The nucleus that now exists has been highly helpful in formulating new schemes and it has not been difficult for the managements to implement boldly new plans with the active encouragement of the central and state governments.

The capacity for manufacturing heavy duty, medium and light commercial vehicles is to be increased many times with a corresponding improvement in the capability of the ancillary industries. Ashok Leyland is giving the lead to the rest of the industry with its proposal for nearly quadrupling its capacity to 40,000 vehicles in the next five years. While the scope for establishing an entirely new plant in Rajasthan or Madhya Pradesh, the former particularly, is being examined, immediately the facilities that Ennore near Madras has are to be expanded and production increased to 15,000 vehicles by 1980-81 and then to 20,000 vehicles in two or three years. With a view to facilitating this expansion, a new complex is being developed at Hosur for undertaking the manufacture of heavy duty vehicles and increasing the production of components. In the first stage of modernisation and expansion, the outlay will be Rs 52 crores and the mobilisation of resources has been planned in such a way that the company will not have any disadvantage on account of conversion of portions of term loans granted by the financial institutions into equities at dictated premium. Immediately the output of vehicles is being stepped up with the import of components and parts which are in short supply, but the difficulties in this regard may be overcome before long with the arrangements that are being made to augment production by the ancillary industries. Standard Motor Products also is increasing steadily its output of light commercial vehicles even while exploring the possibilities of manufacturing medium duty vehicles. Thus, two established automobile producers are expanding their activities.

However, another development having great potential for growth is taking shape. Simpsons are finalising the manufacture of diesel engines, tractors and automobile components. They have a programme for doubling the output of diesel engines, besides raising by more than 50 per cent the output of tractors of new types. With a view to achieving an immediate increase in production of commercial vehicles and creation of new capacity on a dispersed basis, Simpsons have been encouraged to conclude a technical and financial collaboration agreement with Ford of the United Kingdom. A consignment of chassis for medium duty commercial vehicles in semi-knocked down condition has already been imported and it is expected that these vehicles will be marketed in the next few months after being fitted with Perking diesel engines produced by Simpsons and various other indigenous components so that the initial deletion in the foreign exchange content may be even 57 per cent of the end-price. It is intended to promote eventually a new project in which

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IN THE NATION 63-69
Shadows over Sixth Plan
Destabilising the Centre
Engineering Exports without Steel ?
Fostering Project Exports
Ambitious Auto Plans
Mail at Snail's Pace
Congestion at Calcutta Port

WINDOW ON THE WORLD 70-74
China Imports Technology
Havana Summit
Dearer Oil Prompts Gloomy Forecast
Predicting the Unpredictable
Making the Desert Bloom

COVER FEATURE 76
Ten Years of Nationalised Banks

POINT OF VIEW
Oil Shadow Over World Economy —*V.R. Bhatt* 85
Promoting Growth with Equity —*R.K. Rath* 89
Health Hazards of Water Pollution —*R.B.L. Garg* 91

COMPANY ANNOUNCEMENT
International Instruments Ltd. 86

TRADE WINDS 93

COMPANY AFFAIRS 96

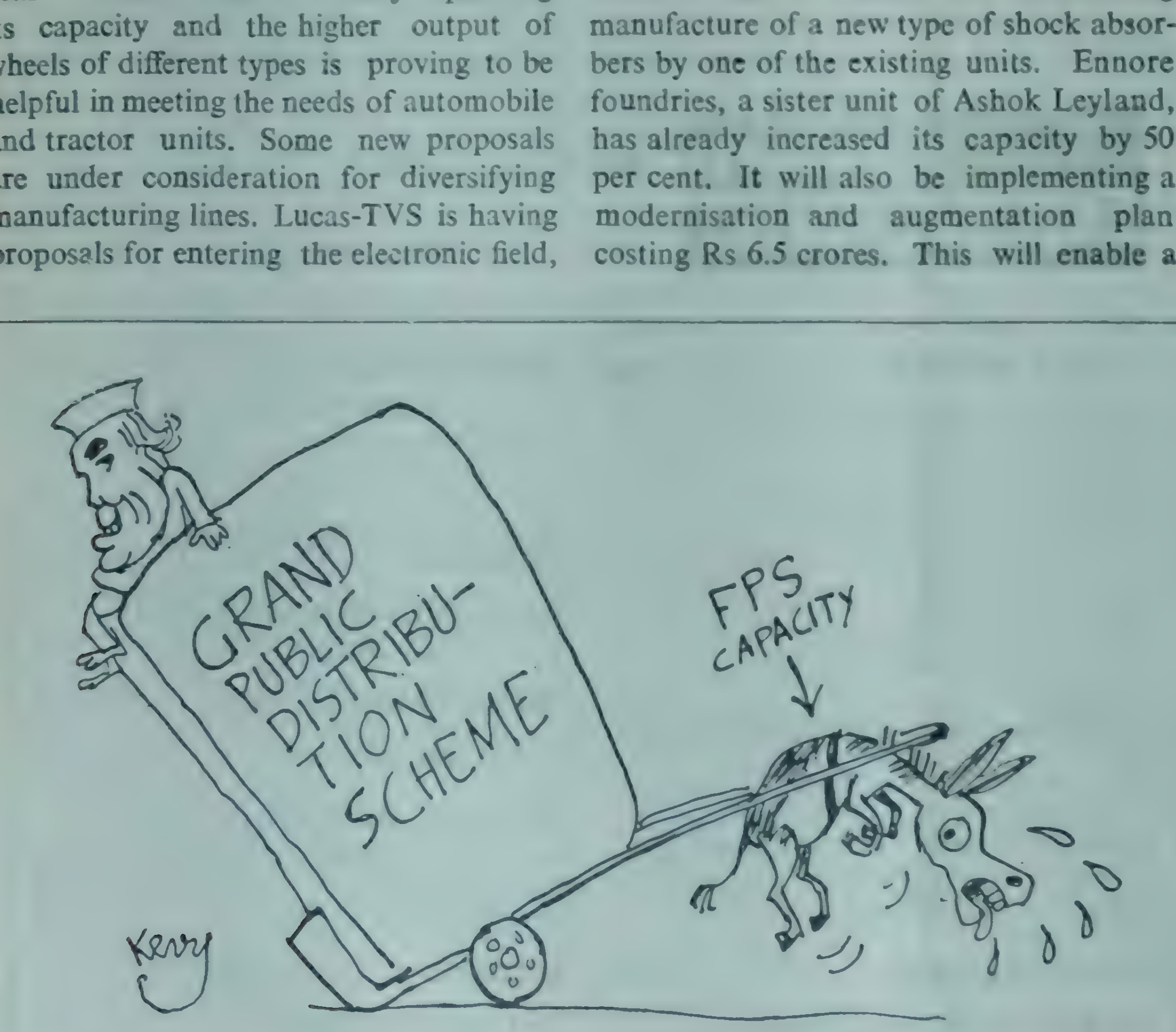
COMPANY MEETINGS
The Tata Engineering and Locomotive Company Ltd. 99
South India Viscose Ltd 101

RECORDS & STATISTICS
Dagli Committee Report 103

Ford will be financially interested so that vehicles can be produced completely within the country. This venture may thus involve a capital outlay of over Rs 60 crores and the final contours may become evident after the arrangements now under way for marketing medium duty vehicles with chassis imported on SKD basis, become fully effective.

The ancillary industries too have their own bold plans. The Simpson group has already increased its output of bimetal bearings. The arrangements for farming out production of components by small entrepreneurs in order to increase the output of diesel engines are being finalised. The manufacture of clutch assemblies by another unit is being steadily raised while the output of pistons and rings has been increasing markedly. The TVS group has been silently and ambitiously expanding its activities. Sundram Abex is the new entrant in the field for manufacturing brakelining equipment. But the remaining four big units—Wheels India, Lucas, TVS Sundram Clayton and Brakes India—have been establishing new records in respect of production and turnover year by year. Wheels India is already expanding its capacity and the higher output of wheels of different types is proving to be helpful in meeting the needs of automobile and tractor units. Some new proposals are under consideration for diversifying manufacturing lines. Lucas-TVS is having proposals for entering the electronic field, while Brakes India is implementing a project in a notified industrially backward area for producing non-ferrous castings at a cost of Rs 3 crores. Sundram Clayton has a new project for producing mopeds with an ultimate capacity of one lakh units annually. This unit is located at Hosur near Bangalore (within Tamil Nadu) and the vehicles are scheduled to be marketed before the end of the year. The economy in fuel consumption will be so attractive in the present context that the company may be hard put to meet the demand from consumers and it may be necessary for the government to waive the stringent export obligation. It will be desirable to save consumption of petrol, and therefore expenditure in foreign exchange, than attempt to earn foreign exchange through export of mopeds which will be less than the amount saved through fuel economy. The Rane group is implementing new plans with Rane Madras raising its output of clutches and parts and steering gear. The new unit at Hosur also will be expanding its capability. Rane Brakelinings has been spectacularly improving its turnover in the past few years. There is also a scheme for undertaking manufacture of a new type of shock absorbers by one of the existing units. Ennore foundries, a sister unit of Ashok Leyland, has already increased its capacity by 50 per cent. It will also be implementing a modernisation and augmentation plan costing Rs 6.5 crores. This will enable a near-doubling of output of quality castings which are now in short supply.

In Karnataka the huge plants of Escorts and Goetze India have already swung into production of new ranges of pistons and rings. MICO has been meeting the increasing demand for fuel injection equipment and spark plugs. International Instruments is expanding its activities, besides establishing also a new unit at Bommasundra near Bangalore, in a backward area. In Trivellore, in Tamil Nadu, Hindustan Motors is imperceptibly raising its output of dumpers and other earthmoving machinery. The details of these new schemes clearly emphasise the fact that the automobile and ancillary industry has suddenly swung into action after a period of slumber and the new pace may call for careful monitoring of the execution of various projects and effective application of financial and physical resources.



Mail at snail's pace

BUSINESS ORGANISATIONS in Calcutta have recently expressed concern at the sharp deterioration in the postal, telegraph and telephone services. They have complained that even express telegrams are being delivered after a lapse of more than a week. The late receipt of railway receipts, invoices and other documents creates many practical difficulties for industry and trade. Often, they have to pay heavy demurrage because of their inability to take delivery of the goods in time due to postal delays. Chambers of commerce and other industrial associations have repeatedly drawn the attention of the authorities concerned to the hardship experienced by their constituents as a result of the inordinate delay in the delivery of letters and telegrams. Even though specific instances have been brought to the notice of the authourities, the grievances have not been redressed. On the other hand, the situation has further worsened and there is hardly any sign of improvement.

The efficiency of Calcutta Telephones has also seriously declined in recent months. Even the police, fire brigade, and electricity stations have complained about their inability to get prompt service from the Telephone department. It has been reported that in the Raj Bhavan, a number of telephones has been "dead" for over a month. In the Writers' Building, which has 46 direct lines, more than half of them are said to be out of order every day. One wonders how the state government can afford to conduct its work with speed and efficiency if the telephones do not function properly.

While presenting the budget for 1979-80 Mr Charan Singh said that the unit costs of a number of our postal services exceeded the revenues they fetched. Besides, the modernisation of telecommunication services called for large capital investment. Therefore, the Finance minister justified his decision to raise the postal and telecommunication tariffs so as to yield an additional revenue of nearly Rs 58 crores per annum. Few will grudge this increase if the government at the same time, took effective steps to tone up the efficiency of the departments concerned. On the other hand, even with the higher charges, industry and trade as well as the common man have to put up with long delays and many difficulties in using these services.

electronic mail

The *Economist* (London) said, in its issues of June 16, that "electronic mail, which will eventually funnel most company correspondence across America from one facsimile machine or word processor to another, has come of age". When developed countries are thus making rapid headway in modernising their communications system, how can India afford to handle mail with snail's speed ? The government of West Bengal should take up this matter strongly with the ministry of Communications. The state's economy cannot expand unless, along with the improvement in the power supply, the departments of posts, telegraphs and telephones operate at a high level of efficiency.

West Bengal has as many as 13 backward districts out of a total of 16. The United Front government has been trying to develop them but the absence of infrastructure facilities has been a serious handicap. If Calcutta itself suffers from major deficiencies in respect of postal, telegraph and telephone services, one can imagine the plight of citizens and industry and trade in the districts. West Bengal's sixth plan has been drawn up on an ambitious scale but it will have the desired impact only if the system of communications is improved immediately.

Congestion at Calcutta port

ALTHOUGH THE problem of congestion in the Calcutta port has not been as acute as in Bombay, yet it has to be tackled in right earnest so that the industries in the eastern region are not handicapped in their efforts to promote exports and arrange imports. Recently, a monitoring committee has been set up consisting of the representatives of the Shippers' Association, the Calcutta Port and the Shipping Lines to examine the various aspects relating to congestion. The committee has also been asked to define what exactly constitutes congestion. The shippers have been saying that there is no congestion in the port to such an extent as to warrant the levy of a surcharge by the shipping companies, while the latter have been arguing that the situation is far from normal and therefore they are justified in imposing this levy. With effect from April, some shipping companies introduced a surcharge of 25 per cent, but subsequently reduced it to 15 per cent. Some companies decided to charge only 10 per cent while a few did not feel the necessity for such a step. The monitoring committee is expected to study the problem from all angles and make its recommendations. Meanwhile, the authorities concerned should see to it that the port's efficiency is stepped up at all levels so that the loading and unloading operations can be conducted speedily.

More ships have been arriving at the Calcutta port this year than in 1978. Compared to the average arrivals of 80 ships per month in 1978, in the current year their number has gone up to 92. The government's decision to divert more ships from Bombay because of the severe congestion in that port has also contributed to the larger arrivals in Calcutta. But the latter's handling facilities, which have never been satisfactory, have now come under more severe strain. About ten jetties are reported to have gone out of commission, while the holding capacity of many others has been reduced owing to various reasons. The number of forklifts, trailers, tractors and other equipment has always been inadequate and their poor maintenance and lack of timely repairs have created difficulties in handling them. The government therefore should give top priority to modernise the port's equipment and this programme should be carried out expeditiously.

Meanwhile, the port authorities should take effective steps to reduce the congestion. All gift cargo should be removed more quickly than is the case at present. It is estimated that currently about 12,000 tonnes of gift cargo, received by the various welfare organisations, are clogging the sheds. About 20,000 tonnes of steel are also reported to have accumulated in the docks due to the strike by the employees of the Steel Authority of India. There is, therefore, an urgent need for close cooperation among the different departments in order to ensure that the port's facilities are put to maximum use.

removing clogs

Shippers and shipping companies also can contribute a great deal in order to achieve the smooth flow of export and import of cargo. For example, shippers can help to improve the turn-round of ships by getting their cargo in time for despatch. Similarly, the shipping companies should correctly indicate the time when their vessels will be ready for receiving the cargo.

The character and composition of the cargo passing through this port have been changing in recent years and therefore its problems have to be dealt with greater realism and seriousness. For example, if a surcharge becomes inevitable due to congestion, why should it not be levied in a manner which will be fair to all the interests concerned ? Again, why did not the shipping companies consult the Port Trust authorities before deciding to levy the surcharge ?

Window on the world

China imports technology

CHINA'S HUNGER for technology is becoming more and more obvious. After several years of isolation, this country is opening up in various ways in order to up-date its industrial potential, which it feels has lagged behind.

The Chinese government is planning for a £1.62 billion trade deficit this year and hopes to treble imports of technology and equipment. China's economic plan for 1979, which was published recently, revealed that imports during the year would increase by 32.4 per cent to 24.8 b yuan (£7.45 b). Export growth will slowdown from 20 per cent in 1978 to 14.7 per cent so that total exports will be 19.2 b yuan (£5.77 b). Imports will include technology and equipment worth 4.7 b yuan (£1.4 b), an increase of 220 per cent over the 1978 figure. The boost in imports is "a major policy decision" according to vice-premier Yu and it reflects the present government's commitment to rapid modernisation. But emphasis will be put on importing technology and equipment to meet China's light industrial needs.

Investment in industrial construction this year may be around 40 b yuan (£12 b), of which about 10 per cent will come from foreign exchange loans. China has negotiated terms for three major loans so far—a credit line of £3.3 b from France, a credit facility worth £560 m from Britain's Export Credits Guarantee Department, and a £930 m loan from a consortium of 31 Japanese banks.

As a major step to encourage the inflow of technology into the country, China, for the first time, has allowed foreign firms to establish joint ventures with Chinese companies and to send home the profits in hard currency. China also will impose income tax on these ventures. (China has not had an income tax in any form since 1949.) The law provides for a reduction or rebate in the income tax during the first two or three profit-making years for those firms which are equipped with up-to-date technology. Foreign participants who reinvest any part of their share of the profits inside China also can apply for partial income-tax rebates.

The foreign partner would be expected to contribute at least 25 per cent of the total investment in the company, which will be of the limited liability type. Profits, losses and risks are to be shared by the parties involved in proportion to their contribution to the registered capital. Each party may contribute cash, capital goods and industrial property rights, with the technology or equipment contributed by the foreign participant—"genuinely advanced and appropriate to China's needs."

The recently signed Sino-US trade pact also has ensured the smooth transfer of technology from the United States to China. The three-year trade agreement provides for according of the most favoured nation status by the two countries to each other. Normal protection is to be made available to the US companies doing business in China. The US patents, trade marks and copyrights also will be protected in China under the agreement. The pact also satisfies a major precondition to granting official export-import bank credits to China.

In 1978, the Sino-US trade totalled $1.1 billion, according to the US Commerce department. It is expected to grow to $2 billion in 1979 and reach $3 to 4 billion in the next five years. At present, tariffs on Chinese goods entering the United States are, on the average, twice as high as those on goods from other countries. The trade pact, when finally approved, will reduce tariffs on these goods from an average of 24 per cent to 5.5 per cent.

Before MFN becomes a reality for China, the US president, Mr Jimmy Carter, must seek a waiver to the Jackson-

Vanik amendment to the 1974 Trade Act. It prohibits MFN treatment for communist countries that restrict the right of their citizens to emigrate. A signed trade agreement also will help China get credits from the US export bank. The bank's legislation prohibits granting credits to a communist country that does not have MFN status.

Havana summit

THE CUBAN authorities having already invited Egypt to attend the September Havana conference of the non-aligned, a major issue that was feared to result in a disruption of the non-aligned movement has been resolved. The invitation has been sent in spite of the efforts made at the recent Colombo meeting of the co-ordination bureau of the non-aligned nations by the Arab and other Muslim countries for the exclusion of Cairo from the Havana summit as a sequel to the Egypt-Israeli peace treaty. The Cuban vice-president, Mr Carlos Rafael Rodriguez, explained at a press conference in New Delhi on July 10 that the invitation to Egypt had been sent as the move for its expulsion from the movement had not attracted consensus at the Colombo confabulations. Cuba could not take any other course, even though its views on the Egypt-Israeli treaty coincided with those of the Arabs.

It may be recalled that an understanding had been reached between the Yugoslav president, Marshal Tito, and the Indian prime minister, Mr Morarji Desai, during their talks last month in Yugoslavia that they would attend the Havana summit with a view to obviating the possibility of the non-aligned movement being split by divisive forces. President Tito was earlier reported to be disinclined to attend the summit because of the strained relations between his country and Cuba. The Indian prime minister had indicated that it might not be possible for him to take part in the summit if the move of the Arab and other Muslim nations opposed to the Egypt-Israeli peace treaty to exclude Cairo from the summit succeeded.

The other controversial issue of according representation to Kampuchea, however, is yet to be resolved. No consensus has been reached so far on replacing the Pol Pot representative by a representative of the new regime of Pnom Penh. A meetting is proposed to be held between Cuba and India in August to discuss this issue. In the meanwhile, Mr Carlos will be visiting the capitals of various other non-aligned nations to sound them on the Kampuchean representation issue and various other matters. The only two other countries which have also not been invited to the summit are Uganda and Chad. They have been left out, according to Mr Carlos, because the Organisation of African Unity has not yet made up its mind on the internal developments there.

Mr Carlos indicated that the Havana summit would consider a proposal to set up ad hoc groups to find political solutions to the disputes and conflicts between the non-aligned nations. He was fortnight in asserting that the socialist countries were a "natural ally" of the non-aligned nations who were committed to anti-colonialism, anti-imperialism, anti-racialism, anti-neocolonialism and anti-Zionism. At the same time, he maintained that not all the non-aligned countries accepted this view. As such Cuba would go by consensus.

As already reported in this column a fortnight ago, both Yugoslavia and India desire that the issue of restructuring the global economy for the benefit of the under-developed, which has been somewhat overshadowed by the internal squabbles of the non-aligned, should be made the main thrust of the Havana meet. As a result of the different rates of economic growth of the non-aligned nations in the recent years, a good deal of complementarity now exists amongst the developing countries, which was not the case two decades ago when the non-aligned movement started. They, therefore, are in a position to share their expertise to mutual benefit and this can provide support for the consolidation of unity among them.

Dearer oil prompts gloomy forecasts

FORECASTERS all over the world have started projecting the precise impact of the recently announced price rise by the Organisation of Petroleum Exporting Countries (OPEC). For instance, the Economic Models Group of Companies, an independent forecaster in Britain, has published a gloomy view of the medium-term prospects for the British economy. Until 1981, government policy is forecast to squeeze profits and retard investment, while oil production will support sterling and depress exports. For this reason employment growth in the period is expected to be poor and manufacturing production sluggish. After 1981, the group

Eastern Economist 30 Years Ago

JULY 8, 1949

The problem of cement shortage, one of the major obstacles to rapid industrialisation, will be solved to some extent with the introduction of a comprehensive scheme of control over distribution, details of which were announced by the Government of India recently. The scheme, prepared on the recommendations of a conference of the provincial representatives and Regional Honorary Cement Advisers, divides the cement to be distributed into two categories—the indigenous and the imported—with a separate plan of distribution for each. So far as the imported cement is concerned, the provincial and State Governments have been given complete authority over its distribution, marketing and fixation of prices. Small quantities of imported cement may be sold without permit to bona fide consumers for immediate repairs to buildings, etc. As regards indigenous cement, it has been decided to review all permits issued prior to January 1, 1949 with the object of reducing the outstanding orders so that factories might be enabled to meet current demands more promptly. The provincial quotas which have been considerably enlarged will cater to the maintenance requirements of all industries which are not controlled by the Centre. Provincial Governments have been asked to be "realistic" and to base their demands on sanctioned budget provisions for projects for which cement is required. Another important feature relates to the removal of cement quotas by rail transport. Hereafter separate quotas of wagons will be earmarked by each factory for each province as well as for the Centre in proportion to the allocations made to them from the factory.

observes that the growth of the UK oil sector will be minimal and the real exchange rate will decline and manufacturing competitiveness stabilise.

The outlook for manufacturing beyond 1985 is much brighter. Consumer spending on non-durables and services is expected to grow faster than on durable goods over the next six years. Employment prospects in the services sector should therefore improve. The group has forecast that by 1985 the cost of an average house may move up from the present level of £18,000 to £45,000. However, in the short term, the rise in house prices is expected to end with no increase in 1980.

Consumption of durables is expected to favour the electrical sector at the expense of car manufacture. It has been observed that the domestic budget share of radios and electricals might rise. Sales in this sector are expected to rise by an annual average of 4.8 per cent between 1979 and 1985. Growth in the electrical engineering and manufacturing sector is forecast at an annual average of 3.4 per cent over the same period. Other manufacturing sectors showing strong growth are expected to be instrument engineering, chemicals and, after 1981, motor vehicles. Certain basic industries are anticipated to continue to decline upto 1985, in particular iron and steel, ship-building and marine engineering and textiles.

auto production

The Economist Intelligence Unit too has forecast gloomy prospects for world car production, which jumped by 43 per cent between 1970 and 1978. It is expected to advance by less than 8 per cent up to the year 1985. The main impact will be felt in Japan where output soared by 87.5 per cent to six million a year in 1970-78. No growth is expected for Japan between now and 1985.

It has been maintained that Japanese prospects were dimmed by moves towards protectionism in western Europe and north America; by the indigenous motor industries developing in a number of Japan's export markets and by the pressure for the Japanese to establish assembly plants in the US and Europe.

In north America, after a 39 per cent growth to 10.4 m units a year between 1970 and 1978, car production might slip by nearly four per cent a year by 1985. Similarly, in western Europe, the early 1970s growth of 15 per cent would be transformed into a fall of nearly one per cent by 1985 with output down from 11.6 million a year in 1978 to 11.5 million.

The outlook for commercial vehicle production is not particularly bright either. Between 1978 and 1985, output in north America is forecast to drop by more than 9 per cent from 4.4m a year to 4.0m. In western Europe, production might remain around the 1.5 m per annum level. Japan should see some growth, from 3.3 m to 3.5m a year, but this would represent only a six per cent rise compared with 61.5 per cent from 1970 to 1978.

Predicting the unpredictable

THE PROBLEMS and prospects of long-term world development have been analysed in a report to member governments of the Organisation for Economic Co-operation and Development. The report by the Interfutures Project, an international research team, was released a few days under the title : "Facing the Future: Mastering the Probable and Managing the Unpredictable". The Interfutures project was launched over three years ago on the initiative of the Japanese government, and carried out within the OECD Secretariat. It has attempted to get an independent assessment of the problems which the advanced industrial societies will face in the long term, both in their own development and in their relations with developing countries.

The report presents possible developments, opportunities and constraints up to the year 2000 and beyond for such fields as population, energy, raw materials, environment and technology. It draws on specific studies on possible development strategies of Third World countries, long-term prospects for various industrial sectors such as steel, electronics, shipbuilding, and engineering. These have been linked to other Interfutures studies on the main element contributing to structural change in OECD countries, and on global and partial scenarios designed to depict future possibilities.

The report tackles four major issues :

(1) Can world economic growth continue in the foreseeable future without being halted by physical limits imposed by global supplies of energy, raw materials and cultivable land, or by the environmental impact of emissions of carbon dioxide, thermal waste and pollutants ?

(2) What problems will confront the advanced industrial societies during the next quarter-century ? What are their long-term macro-economic prospects for growth, price stability and employment ?

(3) How might the societies of the Third World evolve, given the immense challenges which confront them. How can the developed and developing countries undertake joint long-term action in the areas of mutual interest to improve the functioning of the international economic systems from the standpoints o efficiency and equity ?

(4) Increasing world interdependence offers new opportunities, but it is also a source of uncertainty and vulnerability for each country. What are the long-term prospects for this interdependence ?

Industrial Countries

Even if there are no absolute limits t growth due to lack of resources or insufficient innovation, the industrialised countries, the report says, are likely to experience more moderate rates of economi growth, both because of external uncertainties (emergence of a multipolar world difficulty of the energy transition, existence of monetary problems) and becaus of internal factors (decline in the estimated rate of return on investments, sensitivity to inflation). Aspirations to new life-styles will develop, notably as regards allocation of time, participation in decision making, work and leisure, the family, cu ture and ecology, though it is not possibl to say to what extent this will represen a change in demands or a more radica change in values, and consequently whether one dominant life-style will emerg Four [great techuological adventures ar under way : in electronics (teleprocessin and automation); in biology, with wide implications for medecine, agriculture, and industrial activities; in energy production, with the development of alternative major sources of primary energy; and finally in the use of the oceans and space.

The developed societies, the report adds, are on the verge of major structural transformation due to pressures from demographic changes, the changing pattern of final demand, the increasing cost of exchanges with the physical environment and, above all, shifts in the competitive positions of their economies. The energy crisis, moderate growth and the development of foreign competition will create a constant tug-of-war between the acceptance of an outward-looking stance and the temptation to withdraw.

Given these trends, the present industrialised countries will have to produce new solutions to the twin problem of inflation and unemployment, whilst adjustment to the new international context will be crucial as their relative prominence declines.

Developing Countries

The developing countries, which will have a combined population of about 4.5 billion by the end of the century, will show increasingly diversified characteristics. The middle-income developing countries have excellent growth prospects if markets in the advanced industrial societies are large enough and if they can borrow part of their financing requirements, which implies a degree of reciprocity by them in their trade with the developed countries.

On the other hand, the situation of the poorest developing countries will improve only very slowly, and those with per capita incomes of below or about US $300 (at 1976 prices) at the end of the century might well have a combined population of 1,650 million. Although their proportion will decline sharply, the actual number of people in a state of acute poverty may not decrease appreciably from its present level.

Growth of the non-oil producing developing countries will depend very much on the availability and price of energy. The food dependence of the developing countries is likely to increase on the whole, though without creating insoluble problems.

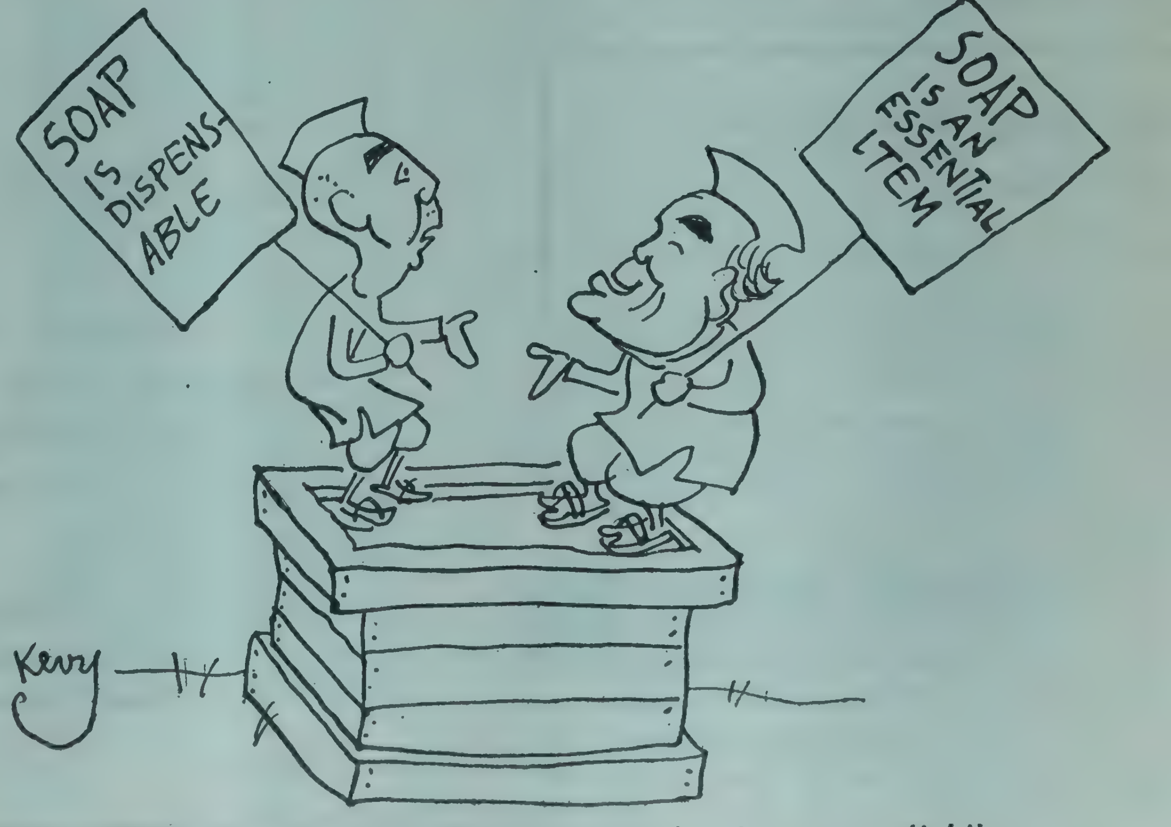
Industrialisation will make spectacular headway in certain regions of the Third World, but the use of technologies suited to the prevailing economic and social conditions is important in order to increase employment, improve income distribution and permit the creation of mass consumption markets. In such a context, the Third World's development is in the interest of the developed countries.

International Economic Relations

Economic, ecological and cultural interdependence will increase during the latter part of this century. This will have beneficial effects but it will also create new vulnerabilities. The respective economic weights of the different nations and groups of nations will change both within the OECD area and between that area and the Third World. The United States' exceptional assets will ensure that it retains a role of the first magnitude, but that role may change because of its declining share of world income. With Japan's increasing prominence, the industrialisation of south-east Asia and China's new policy, a zone may emerge in east Asia which would be one of the important centres of the world economy. The European Economic Community's share in world income will also decline and European countries will experience difficult problem of organisation and structural adjustment. Whilst the OPEC countries and the industrialising countries of south-east Asia and Latin America will become major elements of the world economy, south Asia and sub-Saharan Africa will remain, for the most part, poor areas.

The continuing internationalisation of industry will constitute one of the major aspects of interdependence. In the developed countries, the interaction between industry and research, plus the complementarity between industry and services, will progressively alter the concept of industrial activity ; a new generation of pace-setting industries will replace those which were responsible for post-war industrial growth.

The trend of international trade will be very sensitive to growth rates, the nature of north-south relations and the decisions of the main countries on whether to opt for more extensive liberalisation or for a neo-protectionism. The share of the Third World (excluding China) in international trade might rise from 12 per cent at the beginning of the 1970s to 18-22 per cent at the end of the century. The increase in multinational companies' trade and growing government intervention in trade may necessitate new forms of concerted action and co-operation to facili-



All right ! Let us agree that the soap-box is an essential item.

tate the extension of free trade in a manner that does not provoke governments to compromise it.

In brief, the most likely trend is one of moderate growth in the developed countries (with a tendency for productivities to diverge and the incorporation of certain elements of the new values and new demands oriented growth), differentiation of the Third World and adaptation of more subtle policies to promote national economic activities. Several features of this could be unsatisfactory. Furthermore, a number of crises, which the report tries to identify, are conceivable, among them an oil crisis due either to political events or to insufficient investment in exploration and extraction.

Thus, the report concludes, there is a need for new forms of international cooperation to :

- improve the functioning of international markets ;
- reduce the vulnerability of domestic economies ;
- encourage governments to formulate their policies so that they take account of the diseconomies they are liable to inflict on others ;
- constantly adapt institutions to the new needs.

Management of world interdependence can only come about through a long process of learning, and the pragmatic, but active, pursuit of this process is essential.

Making the desert bloom

A TURNKEY integrated farm and dairy installation, considered to be the largest of its kind in the world, is to be delivered to Saudi Arabia soon by Sweden's Alfa-Laval group under the terms of a Kr 120 million ($25,000,000) order from the newly-formed Saudi Arabian Agriculture and Dairy Co (SAADCO). In using fresh milk in so hot a country, the project is expected to prove the feasibility of large-scale dairy farming throughout west Asia.

The contract is unusually comprehensive in that, in addition to covering delivery and installation of the plant itself, it extends to supply of farm and milk-processing equipment, irrigation, cultivation and harvesting of fodder plants, animal husbandry, and wholesale distribution of dairy products, as well as staffing and management for the first five years of operation.

Swedish engineers have spent **2-1/2** years making field studies in situ and some 600 hectares of the 2,500 ha site—located in virgin desert—are currently being prepared and irrigated in readiness for the cultivation of grass and alfalfa for roughage. Ten harvests per year are possible, thanks to the hot climate.

A self-replacing herd of 7,000 cattle, including 3,600 Friesian dairy cows, will be fed the roughage, mixed with imported concentrate. The animals will be kept on the sand in large open pens. Simple roofs providing shadow are the only shelters necessary.

The dairy plant will have a daily capacity of 50,000 litres of pasteurized consumer milk, 10,000 litres of yoghurt, 3,000 litres of a fermented milk product, 750 kg of soft cheese, 4,400 litres of ice cream, and 3,000 litres of ice bars. The bulk will be delivered to the Saudi Arabian capital, Riyadh, some 80 km away.

The cows are to be milked in eight parlours, each incorporating 12 milking units. This permits 96 cows to be milked simultaneously, giving an hourly capacity of 520 cows. Alfa-Laval's "Duovac" milking system provides two actions—gentle and rapid—with changeover being triggered by the cow's own reactions. The milk is piped to an instant-cooling plant for storage in mobile tanks.

The dairy plant itself is to be built of prefabricated panels on a structural steel framework. Process equipment will include separators, heat-exchangers, flow-control equipment, manually operated cheese and ice cream machines, and packaging plant. An adjacent utility centre will incorporate five 550 kVA diesel generators and a water pumping and purification plant

Construction work has already begun and the dairy plant is scheduled to begin producing its first milk in the summer of 1980. Fresh milk weigh-in will initially be augmented with milk recombined from powder.

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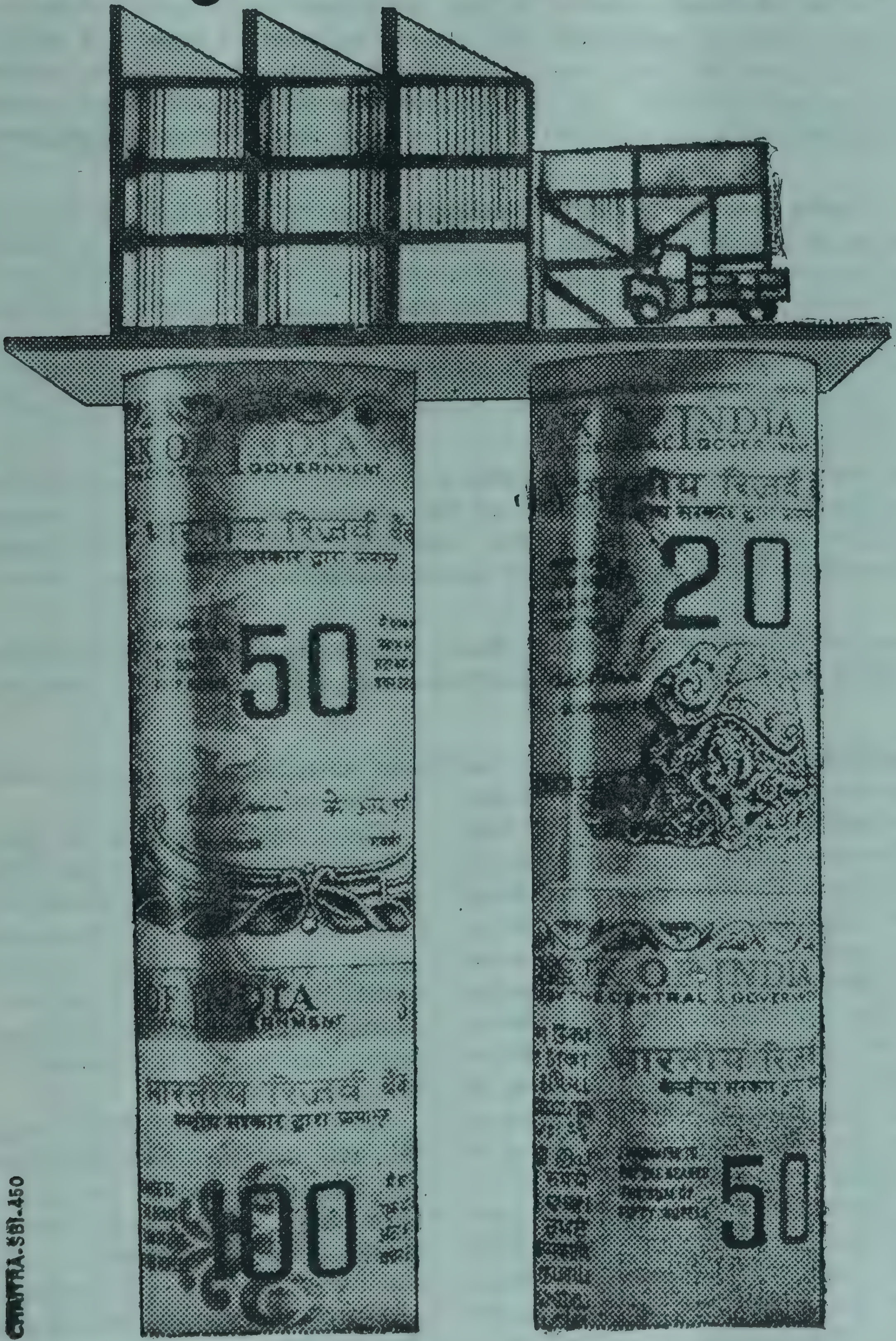

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Cover feature

Ten years of nationalised banks

The nationalised sector of our banking industry completes ten years of operations on July 19. When the 14 major banks in the country were nationalised on this day in 1969, primarily as an off-shoot of the then struggle for political power, without allowing the scheme of social control on banks, introduced by the then minister for Finance and the present prime minister, Mr Morarji Desai, about 18 months earlier, to have a reasonable run, many had expressed doubts whether after nationalisation they would be able to successfully play the role assigned to them and fulfil the expectations of society by mobilising deposits from the rural areas for productive purposes and making available increased credit to the then neglected sectors such as agriculture, the self-employed, the small borrowers, etc., without impairing their profitability. The nationalised banks were also expected to involve themselves in a greater measure in the developmental tasks before the nation.

In this article, **Mr K.K. Ammannaya, Deputy Personnel Manager, Syndicate Bank**, *attempts an assessment of the working of the 14 nationalised banks during the last 10 years. He has expressed satisfaction over the expansion of bank branches in the rural areas as well as over the steady growth in credit to the neglected sectors of the economy. The profitability of these banks, he opines, has not been seriously eroded even though it has come under severe strain as a sequel to the mounting costs of establishment, the rapid expansion of branches and the servicing of small accounts. The nationalised banks, according to him, have been able to strike a judicious mean between profitability and social obligations. They have demonstrated that combining of the business norms of profitability and the pressing social requirements of the day is within the realm of possibility.*

Mr Ammannaya, however, has cautioned that since the fast expansion of branches without adequate efforts at consolidation has to some extent told upon the efficiency and performance of the nationalised banks, it is necessary to go slow in this regard for some time. In fact, similar views have been expressed recently by many other eminent personalities in the banking industry. The position, therefore, needs to be consolidated before a new thrust is provided to the branch expansion programme.

Mr Ammannaya has also dwelt at some length at the tasks ahead. Banks, he points out, can assist in economic development provided the other important infrastructure facilities are created in an adequate measure by the concerned authorities.

THE POST-nationalisation era has been the most crucial in the history of the banking industry in India. The industry has witnessed rapid changes in the scale and scope of banking operations following the changes in the social, economic and political environments.

The major achievements of natiolised banks are in the sphere of branch expansion, deposit mobilisation and extension of credit to priority sectors.

The branch expansion programme, indeed, has made rapid progress since nationalisation. As against 8,321 branches on the eve of nationalisation, the total number of commercial bank branches at the end of December, 1978, was 29,504. The average population per branch for the country as a whole has been brought down significantly. As on December 12, 1978, there were 12,806 rural branches, 7,778 semi-urban branches, 4,668 urban branches and, 4252 metropolitan branches. Table I provides a glimpse of the progress achieved in the sphere of extending the branch offices of banks.

There has been considerable progress in the dispersal of branches in the relatively underbanked states of Assam, Bihar, Jammu and Kashmir, Madhya Pradesh, Orissa, West Bengal, Manipur, Meghalaya, Tripura and Nagaland. The state-wise distribution of branch offices is given in Table IV.

The policy of expansion in deficit states and deficit districts has helped increase the density of bank branches in relatively underbanked states. In some of the relatively underbanked states there has been a significant improvement in the population coverage by commercial banks.

At the end of June, 1978, the credit extended by banks to priority sectors constituted 27 per cent of their gross credit. This was the result of rapid rural branch expansion. On the basis of deployment of funds in the 12 months ended June 8, 1979, it can be concluded that there was a steep expansion of credit by scheduled commercial

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Note: The views expressed in this article represent the personal views of the author and not those of the organisation to which he belongs.

banks. While deposits increased by Rs 4,887 crores, advances rose sharply by Rs 3,014 crores of which increase in food credit accounted for only Rs 323 crores.

Though branch expansion has undoubtedly received a push after nationalisation, it is becoming increasing clear that with several constraints on their resources, banks are finding it extremely difficult to keep up the pace and satisfy the demands for more branches from various regions of the country. Fast expansion without adequate efforts at consolidation has to some extent told upon the efficiency and performance of banks. It is, therefore, necessary to go slow in the matter of expansion and concentrate on consolidation at least for two years in a period of five years. The recent advice of Mr Charan Singh, deputy prime minister (Finance) to go slow in the matter of branch expansion is quite relevant to the banking industry at present.

Mobilisation of deposits has been another significant achievement of public sector banks after nationalisation. The aggregate deposits (excluding inter-bank deposits) of scheduled commercial banks which amounted to Rs 4669 crores as on July 18, 1969, reached the level of Rs 27,440 crores by June 1, 1979. The figure was Rs 26,875 crores as of March 30, 1979. Table II give the data regarding deposits as on December 31, 1977 in respect of various nationalised banks.

Table III gives the data regarding deposits in respect of the banking sector as a whole.

The state-wise distribution of bank offices, aggregate deposits and total credit and share of priority sector advances are given in Table IV.

With the progressive expansion of banking facilities in the rural and semi-urban areas, there is evidence of a gradual shift in the relative preference of the community in favour of bank money, particularly time deposits, as against currency. This is indicative of an improvement in the banking habit of the people.

The rate of growth in deposits was not as satisfactory in 1978 as in 1977 in that while deposits grew from Rs 17,564 crores in 1976 to Rs 21,331 crores in 1977 (a growth of 21.5 per cent) the deposits grew only to Rs 25,303 crores in 1978 (a rise of 18.6 per cent).

In the post-nationalisation era, banks have also shown imagination in formulating deposit schemes to suit the requirements of diverse types of small depositors. Many banks have evolved daily deposit schemes to suit the needs of daily income-earners. Annuity deposit schemes, cash certificates, insurance linked deposit schemes, cumulative deposit schemes linked with various types of benefits, etc, were launched by banks in competition with one another. The Krishi deposit scheme of Syndicate Bank is almost a substitute for crop insurance.

As a result of serious efforts made by banks to attract deposits from common people, there has been a significant increase in the number of depositors in the post-nationalisation period. With the progressive expansion of banking facilities in the rural and semi-urban areas, there is evidence of gradual shift in the relative preference of the community in favour of bank money,

TABLE I

Expansion of Branches of Public Sector Banks and other Commercial Banks

Bank	No. of offices as on 30.6.69	30.6.75	30.6.76	30.6.77	30.6.78	Increase between 30.6.69 and 30.6.78	Increase in the number of rural centres
1. State bank of India	1569	3475	3922	4359	4813	3244	1717
2. Subsidiaries of SBI	893	1739	1848	2000	2192	1299	576
3. 14 Nationalised Banks	4134	9863	11010	12543	13745	9611	4608
4. Regional Rural Banks	—	—	112	780	1405	1405	1275
Total of Public Sector Banks (1+2+3+4)	6596	15077	16892	19682	22155	15559	8176
5. Other Scheduled Commercial Banks	1319	3385	4047	4858	5659	4340	1815
6. Foreign Banks	130	131	130	130	129	—1	—1
7. Non-scheduled Banks*	217	137	151	132	73	144	20

* The reduction in the number of offices of the non-scheduled banks is due to (i) inclusion of some of them in the second schedule of RBI Act and (ii) taking over certain non-scheduled banks by RBI and other scheduled banks.

particularly time deposits as against currency. This is indicative of an improvement in the banking habit of the people. The market for bank deposits is constantly expanding as a result of the intensive efforts made by banks.

Table V gives particulars regarding the performance of public sector banks in various areas including credit.

On the eve of the 10th anniversary of nationalisation of banks it is relevant to indicate the figures of advances and per-employee advances in all the 14 nationalised banks. Table VI gives this information.

The credit deposit ratio of nationalised banks was 63.9 per cent as on November 10, 1978. The ratio of credit to deposits in respect of State Bank group stood at 72.5 per cent and in respect of private sector banks at 64.8 per cent as on the same date. Table VII gives the information regarding total bank credit as well as the share of food credit in respect of various groups of banks as on November 10, 1978. Table VIII gives the information regarding banks' deposits, credit and credit-deposit ratios in respect of rural, semi-urban, urban and metropolitan branches separately.

Since nationalisation banks have been making serious efforts at aligning their functioning with Plan priorities and to fulfil their social obligations. The total advances of scheduled commercial banks, which stood only at Rs 3,599 crores on the eve of nationalisation (i.e. June, 1969), rose to Rs 18,272 crores by June 1, 1979. Table IX succinctly indicates the achievement of banks in extending finance to the priority sectors.

Through their credit operations, banks have been lending a helping hand to various productive endeavours. A noteworthy feature emerging over the last 10 years is the qualitative change in the disposition of bank funds. Given below are the main qualitative changes that have taken place in the post-nationalisation period.

There is a definite shift in favour of priority sectors such as agriculture, small-scale industries, self-employment, small business, road and water transport, professional services etc. In the past, banks did not pay adequate attention to those sectors. Now banks formulate programmes in respect of all these areas and incorporate the same in the performance budget. Sincere efforts are made to achieve these targets.

TABLE II

Deposits in Nationalised Banks as on December 31, 1977

Rank No.	Name of the Bank	Deposits (Rs. in lakhs)	No. of Employees	Per Employee Deposit (Rs. in lakhs)
1.	Bank of Baroda	162264	22039	7.36
2.	Bank of India	164200	26437	6.21
3.	Punjab National Bank	141056	22965	6.14
4.	Indian Overseas Bank	65489	10811	6.06
5.	United Commercial Bank	98762	17537	5.63
6.	Bank of Maharashtra	45913	8210	5.59
7.	Indian Bank	61831	11455	5.40
8.	United Bank of India	79435	14876	5.34
9.	Central Bank of India	164150	31720	5.17
10.	Canara Bank	108351	21456	5.05
11.	Union Bank of India	86030	18326	4.69
12.	Allahabad Bank	44554	9655	4.61
13.	Dena Bank	51235	11371	4.51
14.	Syndicate Bank	84511	19526	4.33
Total 14 nationalised banks		1357781	246084	4.52

TABLE III

Deposits in Banks : 1969 to 1978

Year	Amount (Rs crores)
1969	4876
1970	5665
1971	6397
1972	8381
1973	10087
1974	11587
1975	13482
1976	17132
1977	20679
1978	25303

Within the priority sectors there is increasing emphasis on extension of credit to borrowers in the lower income bracket by way of special schemes at lower rates of interest.

There is greater flow of funds to entrepreneurs and food procurement agencies set up in the public sector.

There is a decline in the share of bank credit to large and medium industries. A significant element in the commercial banks' lending in recent years is the rising proportion of small loans. Export trade is now regarded as a vital sector of the economy and is recognised as a priority sector for the provision of bank credit. The extension of credit to small borrowers in the priority sectors is indeed the main objective of nationalised banks and therefore its magnitude is the real test of its success. During the last 10 years there has been a significant increase in the flow of assistance to priority sectors.

There has been an alignment by banks of their credit operations with the economic development plans of the districts. Public sector banks have been making efforts to formulate and implement district credit plans in recent years.

The lending of public sector banks to the priority sector which constituted 14.9 per cent of their total advances at the end of June, 1969 had gone up to 25.3 per cent by June, 1974. By now the figure has risen to over 30 per cent.

Banks have been making significant contribution towards the promotion of self-employment and identification and promotion of enterprise. Public sector banks have helped to give the small borrower an access to bank credit.

Public sector banks have been able to earn reasonable profits in spite of the increased costs of establishment and mounting costs of branch expansion in the rural areas. The banks have been able to strike a mean between profitability and social purpose. Table X gives the data regarding the profits earned by various banks.

The net profit of banks as a per-

TABLE IV

State-wise Distribution of Bank Offices, Aggregate Deposits and Total Credit to Public Sector Banks† and their Percentage Share of Advances to Priority Sectors

State/Union Territory	No. of Banches		Deposits (Rs. Crores)		Advances (Rs. Crores)		Share of P.S Advances (%)	
	June 1969	March 1978*	June 1969	March 1979*	June 1969	March 1978*	June 1969	March 1978*
States								
1. Andhra Pradesh	444	1325	121.11	743.16	122.09	584.08	24.4	51.0
2. Assam	67	336	33.20	200.87	12.85	88.32	10.3	36.1
3. Bihar	269	1168	168.67	849.85	52.05	363.21	9.1	47.1
4. Gujarat	750	1988	401.31	1584.92	194.89	833.11	15.9	34.8
5. Haryana	140	452	48.78	267.32	23.15	171.84	28.2	72.8
6. Himachal Pradesh	41	241	12 38	97.66	3.49	23.16	2.7	57.0
7. Jammu & Kashmir	17	137	17.95	86.96	0.86	22.87	30.3	71.1
8 Karnataka	510	1480	187.79	856.90	143.04	800.41	24.8	38.6
9. Kerala	331	923	116.79	586.42	76.95	352.90	27.6	39.6
10. Madhya Pradesh	332	1241	107.43	638.36	63.14	365.34	22.3	45.2
11. Maharashtra	946	2385	902.67	3917.07	911.79	3002.30	12.4	21.2
12. Manipur	2	24	1.06	6.89	0.15	3.02	—	81.1
13 Meghalaya	7	41	8.87	26.99	2.52	5.68	50.0	50.4
14. Nagaland	2	21	1.07	10.97	0.06	2.11	40.0	46.0
15. Orissa	96	469	29.49	197.71	14.60	122.17	11.2	46.6
16 Punjab	290	904	185.41	790.49	50.29	300.72	27.9	68.3
17. Rajasthan	311	836	73.73	362.68	38.20	241.89	16.8	47.0
18. Tamil Nadu	721	1624	233.48	1245.94	311.33	1185.93	25.5	29.9
19. Tripura	5	43	3.76	17.22	0.16	6.12	9.5	64.9
20. Uttar Pradesh	639	2351	337.15	1776.18	153.74	831.56	16.9	44.7
21. West Bengal	428	1505	456.45	2160.86	525.80	1430.97	4.4	18.3
Union Territories								
1. Chandigarh	19	50	34.55	115.73	64.13	295.05	4.2	7.1
2. Delhi	207	570	359.80	1976.67	244.90	2030.98	10.2	6.8
3. Goa, Daman & Diu	83	183	48.68	189.38	19.68	74.44	12.6	28.9
4. Pondicherry	11	35	5.06	30.47	4.74	21.89	12.9	45.2
5. All others**	1	37	0.33	18.03	0.01	2.28	—	63.6
Total	6669	20369	3896.97	18755.70	3034.60	13162.35	14.9	28.6

† Includes State Bank of India and its subsidiaries and 14 nationalised banks.

* Data are provisional. Advances includes data relating to bills re-discounted under the new bill market scheme.

** Include Andaman & Nicobar Islands, Arunachal Pradesh, Dadra and Nagar Haveli, Lakshadweep and Mizoram for June 1969 and Sikkim also for March 1978.

centage of working funds which was 0.17 in 1969 remained the same in 1978 as well. There is, however, great scope for improving the profitability of the banking industry as a whole. *It is possible to increase profitability by profit planning as a part of the performance budgeting exercise, adoption of appropriate staffing patterns at branches, thereby eliminating overstaffing, and through minimising controllable expenses.* For this purpose, the coverage of parameters in the performance budget should be expanded so as to provide for planning in respect of profits, expenses and staff requirements as well.

TABLE VI

Advances of Nationalised Banks as at 1977 December

Name of the bank	Advances (Rs. in lakhs)	Total No of employees	Per Employee advances (Rs. in lakhs)
1. Bank of Baroda	103477	22039	4.70
2. Bank of India	108523	26437	4.10
3. Bank of Maharashtra	32556	8210	3.79
4. Indian Overseas Bank	42291	10811	3.91
5. Punjab National Bank	87681	22965	3.82
6. United Commercial Bank	65151	17537	3.72
7. United Bank of India	51862	14876	3.49
8. Indian Bank	39841	11455	3.48
9. Central Bank of India	109165	31720	3.44
10. Canara Bank	71314	21456	3.32
11. Dena Bank	35766	11371	3.15
12. Syndicate Bank	56037	19526	2.87
13. Union Bank of India	52330	18326	2.86
14. Allahabad Bank	27493	9655	2.85
Total 14 Nationalised Banks	883487	246084	3.59

The vigorous exercise of performance budgeting, which some banks have been following in respect of deposits and credit, may be extended to staff requirements, expenses and profits as well. If profit planning is there, then the tendency on the part of branches to have additional staff or surplus staff will be reduced since under the system branches will have concern for profitability. It is, therefore, necessary to introduce comprehensive system of performance budgeting covering staff strength, profits and expenditure, apart from deposits and advances.

By far the most significant achievement of banks in the post-nationalisation era is in the sphere of banking reforms. The shift of the centre of gravity of banking development from urban to rural areas and deficit states, the shift in favour of priority sectors like agriculture, small-scale industries, exports etc, the shift of importance from security to viability of the project in bank lending, the addition of the canon of social purpose to the traditional canons of investment like liquidity, profitability safety and shiftability, etc, the application of the concept of performance budgeting to commercial banking and the linkage between bank credit planning and development plans are some of the important banking reforms of recent times.

With the advent of social control and especially after nationalisation, the national policy in respect of

TABLE V

14 Nationalised Banks Vs 8 State Banks

(as on 31.12.1977)

	Deposits	Advances	Profit	Est. expenditure (Rs. in lakhs)	Total no. of employees	Per Employee			Est. expenditure (Rs in lakhs)
	(Rs. in lakhs)					Deposits	Advances	Profit	
						(Rs. in lakhs)			
1. Nationalised banks	1357781	883487	2859	28820	246084	5.52	3.59	0.01	0.12
2. State banks	693373	467281	886	19619	156741	4.42	2.98	0.01	0.13
Total 22 public sector banks	2051154	1350768	3745	35146	402825	5.09	3.35	0.01	0.09

commercial banks has undergone a thorough change. Till then, the banking system was completely disassociated from the process of economic planning. That the process of development was an integrated process requiring the cooperation of all agents of growth of which the commercial banks are the one, was never realised by our planners and this was the major lacuna in our five-year Plans. Banking is now regarded as one of the most powerful weapons to bring about economic development by mobilising the savings and making credit available to the various sectors of the economy. It is also being increasingly realised that by raising their credit level to the priority and neglected sectors, banks are capable of making a significant contribution towards rapid economic emancipation of masses.

Under the lead banks scheme, banks have been playing a dual role as follows:

(i) Spearheading the process of development by means of lending a helping hand in the development of the backward areas. It is for this purpose that banks have been going full steam ahead in opening branches in unbanked and underbanked centres. Now the accent is to open branches in deficit districts in deficit states. This will help rectify and reduce regional imbalances and disparities in banking development.

(ii) Acting as a consortium leader for the purpose of achieving meaningful coordination among all the banks operating in the district, cooperatives and other financial institutions and other agencies engaged in the task of achieving the economic development of the district in their respective lead districts.

Under the lead bank scheme, all the 336 districts in the country (of course, with the exception of the metropolitan areas of Bombay,

TABLE VII
Deposits and Bank Credit of Scheduled Commercial Banks
(As at 10-11-1978)

(Rs in crores)

Scheduled commercial banks	Deposits	Bank credit			Credit/ deposit
		Total	For food		
			Amount	% of total	
I. **State Bank of India Group (SBIG)**	7009.6 (28.7)	5084.8 (31.3)	754.4	14.8	72.5
1. State Bank of India (SBI)	5635.8 (23.1)	4068.0 (25.0)	646.4	15.9	72.2
2. SBI Associates (SBA)	1373.8 (5.6)	1016.8 (6.3)	108.0	10.6	74.0
II. **Nationalised Banks (NABs)**	13538.0 (55.4)	8655.6 (53.3)	1280.4	14.8	63.9
i. Central Bank of India (CBI)	1656.2 (6.8)	1076.9 (6.6)	173.8	16.1	65.0
ii. Bank of India (BOI)	1503.3 (6.1)	937.3 (5.8)	147.4	15.7	62.4
iii. Bank of Baroda (BOB)	1356.5 (5.5)	923.7 (5.7)	127.6	13.8	68.1
iv. Punjab National Bank (PNB)	1500.2 (6.1)	925.6 (5.7)	145.2	15.7	61.7
v. Canara Bank (CNB)	1194.7 (4.9)	779.6 (4.8)	105.6	13.5	65.3
vi. United Commercial Bank (UCB)	853.5 (3.5)	574.0 (3.5)	81.4	14.2	67.3
vii. Union Bank of India (UBI)	864.9 (3.5)	562.6 (3.5)	81.4	14.5	65.1
viii. Syndicate Bank (SNB)	919.8 (3.8)	623.0 (3.8)	81.4	13.1	67.1
ix. United Bank of India (UTB)	832.1 (3.4)	533.2 (3.3)	79.2	14.9	64.1
x. Indian Overseas Bank (IOB)	686.2 (2.8)	373.2 (2.3)	52.8	14.1	54.4
xi. Indian Bank (INB)	665.1 (2.7)	383.5 (2.4)	59.4	15.5	58.0
xii. Dena Bank (DNB)	551.8 (2.3)	340.0 (2.1)	55.0	16.2	61.6
xiii. Bank of Maharashtra (BOM)	492.2 (2.0)	322.4 (2.0)	44.0	13.6	65.5
xiv. Allahabad Bank (AIB)	461.5 (2.0)	300.6 (1.8)	46.2	15.4	65.1
III. **Private Sector Banks (PSBS)**	387.8 (15.9)	2512.3 (15.4)	245.2	9.8	64.8
Total	24425.8 (100.0)	16252.7 (100.0)	2280.0	14.0	66.5

Data are provisional Figures in brackets are percentages.

Calcutta and Madras and the union territories of Chandigarh, Delhi and Goa) were distributed among all the 22 public sector banks and two private sector banks. Under this scheme, banks have made considerable headway not only in the sphere of identification of unbanked and underbanked centres, but also in branch expansion. District consultative committees have been formed in respect of all the districts and meetings are convened on a quarterly basis. Banks have prepared credit plans for the lead districts. These plans are in various stages of implementation.

To sum up, commercial banks in India have taken rapid strides towards the goals set before them at the time of nationalisation though they have still miles to go. Banking services have been extended both geographically and functionally. All the districts in the country have been covered by bank branches, although there are still some villages which are devoid of banking facilities. The common man now enjoys much better access to banking facilities than he did before nationalisation. To put the whole thing in a nutshell, commercial banks have readily responded to the challenge of nationalisation and have absorbed the new stresses and strains without much dislocation.

Ten years have passed since nationalisation and the banking industry as a whole is marching ahead with intensive efforts at deposit mobilisation, branch expansion, and credit disbursement. No doubt, all these are geared to bring about rapid economic growth and

TABLE VIII

Population Groupwise Classification of Scheduled Commercial Banks' Deposits. Bank Credit and Credit-Deposit Ratios

(Rs in crores)

At the end of December	Rural	Semi-urban	Urban	Metropolitan	Total
1972					
1. Deposits	539.69	1869.04	2086.67	3864.25	8359.65
2. Advances	257.27	783.24	1192.60	3380.70	5613.81
3. C.D. Ratio (%)	47.67	41.91	57.15	87.49	67.15
1973					
1. Deposits	741.38	2317.13	2495.53	4529.97	10084.01
2. Advances	378.77	1024.82	1497.41	4190.10	2091.10
3. C.D. Ratio (%)	51.09	44.23	60.00	92.50	70.32
1974					
1. Deposits	923.57	2627.31	2853.31	5206.34	11610.53
2. Advances	482.71	1224.75	1869.97	4667.98	9245.41
3. C.D. Ratio (%)	52.27	46.61	65.36	89.66	71.02
1975					
1. Deposits	1167.74	3107.65	3390.39	6044.95	13710.73
2. Advances	608.11	1456.23	2180.87	5828.24	10073.45
3. C.D. Ratio (%)	52.08	46.86	64.32	96.41	73.47
1976					
1. Deposits	1569.34	3934.74	4370.37	7732.93	17607.38
2. Advances	877.43	1876.04	2803.30	7995.03	13951.80
3. C.D. Ratio (%)	55.9	47.4	64.1	103.4	79.2
1977					
1. Deposits	2048.66	4667.98	5235.36	9258.94	21213.94
2. Advances	1139.66	2203.88	3284.71	8687.85	15316.10
3. C.D. Ratio (%)	55.6	47.2	62.7	93.8	72.2

efforts are being made by banks to perform their assigned functions within the frame-work of overall national plan. With the introduction of block level planning, banks will have a new task in contributing to growth efforts at block level.

The specific task assigned to banks in this context can be technically called credit planning. Banks have also been expanding and diversifying their business of deposits and advances and undertaking such promotional activities as may make banking an integral part of development. But banks alone cannot achieve the overall economic development of any district. For development is a complex phenomenon and the functions of planning and the functions of banking are two different types of functions. The preparation and execution of development plans is the responsibility of the government, or the district or state planning machinery. Banks may at best operate in a manner conforming to the economic plans prepared by the government authorities. Within the framework of district planning, or block level planning as the case may be, banks can only play the role of a financial leader in providing banking facilities to the district in cooperation with other financial agencies. Credit planning is only a part of overall economic planning and as such banks acting as consortium leaders can only help in the preparation and exe-

> By far the most significant achievement of banks in the post-nationalisation era is in the sphere of banking reforms. The shift of the centre of gravity of banking development from urban to rural areas and deficit states, the shift in favour of priority sectors like agriculture, small-scale industries, exports, etc. the application of the concept of performance budgeting to commercial banking and the linkage between bank credit planning and development plans are some of the important banking reforms of recent times.

TABLE IX

Bank Finance for Priority Sectors

Sectors	June 1969 No. of accounts	June 1969 Amount (Rs crores)	June 1978 No. of accounts	June 1978 Amount (Rs crores)
1. Agriculture				
(a) Direct Finance	160,020	40.21 (1.4)	47,12,072	1235.98 (9.4)
(b) Indirect Finance	4461	122.12 4.1	590,119	421.76 (3.2)
2. Small-scale Industries	**50,850**	**251.07** **(8.5)**	**526,451**	**1640.95** **(12.4)**
3. Road Transport Operators	**2324**	**5.49** **(0.2)**	**196,800**	**305.52** **(2.3)**
4. Retail Trade and Small Business	**33,241**	**19.37** **(0.6)**	**10,13,682**	**295.43** **(2.2)**
5. Professional and Self-employed	**7769**	**1.91** **(0.1)**	**582,749**	**86.34** **(0.7)**
6. Education	**1977**	**0.80** **(—)**	**29,854**	**6.46** **(0.05)**
Total Priority Sector Advances	260,142	440.97 (14.9)	76,51,727	3992.44 (30.2)
Total Advances	—	3016.76	—	13,215.00

(Figures in brackets indicate percentage)

TABLE X

Profit of 14 Nationalised Banks

Rank No	Name of the bank	Profit (Rs lakhs)	Total No. of employees	Per employee profit (Rs lakhs)
1.	Indian Overseas Bank	361	10811	0.03
2.	Bank of Baroda	375	22039	0.02
3.	Indian Bank	229	11455	0.02
4.	Punjab National Bank	341	22965	0.01
5.	Bank of India	328	26437	0.01
6.	Canara Bank	281	21456	0.01
7.	United Commercial Bank	193	17537	0.01
8.	Syndicate Bank	192	19526	0.01
9.	Union Bank of India	156	18326	0.01
10.	United Bank of India	99	14876	0.01
11.	Allahabad Bank	69	9655	0.01
12.	Dena Bank	69	11371	0.01
13.	Bank of Maharashtra	23	8210	Neg
14.	Central Bank of India	143	31720	Neg
	Total 14 Nationalised Banks	2859	246084	0.01

cution of credit plan for a given district or block. Extension of banking and credit facilities is only a part of the total infrastructure required for the economic development of an area. Therefore, banks may succeed in spearheading the process of development in a district or block only where other important infrastructural facilities like transport, educational facilities, communication, storage, processing and marketing are adequately provided. Thus, overall economic development through district level planning or block level planning can be achieved only if bankers and planners join hands. In other words, banking expansion, bank credit planning and district economic planning must go hand in hand for the purpose of achieving overall economic development of any district. All the same the district credit plans prepared by lead banks attempt to formulate the plans for district development on block level basis. With all the constraints under which these plans are prepared, they mark a milestone in the field of planning. *This is definitely an achievement of post-nationalisation era.*

The plans prepared by banks could be suitably designed in accordance with current thinking evolving in the apex planning body in the country, viz the Planning Commission. Once it is done, serious efforts could be made for their implementation. With a view to effectively facing the future challenge in this regard, banks have got to consolidate themselves in the next few years by reducing the pace of branch expansion, if necessary. The government may give appropriate guidelines to banks in this regard, so that armed with the same, it will be possible for banks to attempt their consolidation, so necessary for their effective functioning as agents of economic change under the schemes of block level planning and the lead bank scheme. It is suggested that in each period of five years, a period of two years may be provided for consolidation of existing branches.

Fast expansion without adequate efforts at consolidation has to some extent told upon the efficiency and performance of banks. It is, therefore, necessary to go slow in the matter of expansion and concentrate on consolidation at least for two years in a period of five years. The recent advice of Mr Charan Singh, Deputy Prime Minister (Finance), to go slow in the matter of branch expansion is quite relevant to the banking industry at present.

Once consolidation is achieved, it is possible for banks to go full steam ahead with the extension of credit and financial assistance to the neglected and priority sectors and play their role more effectively and efficiently in the matter of contributing to the process of economic growth. It is essential that the government evolves and adopts an appropriate policy so as to ensure that expansion and consolidation go hand in hand. *The holiday* of two *years for expansion in a period of five years would help achieve the goal of consolidation as well.* All concerned authorities including the government and the Reserve Bank of India may bestow thought on this and consider evolving appropriate policies for the benefit of the economy in general and the banking sector in particular.

TABLE XI

Profits of State Bank of India and its subsidiaries

(December 1977)

Rank No	Name of the Bank	Profit (Rs lakhs)	Total No of employees	Per employee profit (Rs lakhs)
1.	State Bank of India	770	120883	0.01
2.	State Bank of Travancore	24	4968	Neg
3.	State Bank of Mysore	21	4916	Neg
4.	State Bank of Bikaner and Jaipur	27	7110	Neg
5.	State Bank of Patiala	12	5018	Neg
6.	State Bank of Indore	10	2859	Neg
7.	State Bank of Saurashtra	11	3983	Neg
8.	State Bank of Hyderabad	11	7004	Neg
	Total State Banks	886	156741	0.01

Oil shadow over world economy

London

V. R. Bhatt

The extent of the economic damage to the OECD from the latest oil price hike has yet to be worked out but the reaction of western Europe is a compound of anger and threat though a military solution is ruled out except in extremis. The most promising response is a freeze on oil consumption, which most participants in the recent western summit have pledged, along with research on other sources of power. It is realised that the effect of the oil price hike will be more severe on the developing countries such as India. Though the Tokyo summit has promised help, it is to be seen to what extent this pledge will be implemented.

IF ONE goes by the millions of words in the western media, written or spoken, on the latest energy crisis caused by contracting supplies and increasing prices of oil or by the gloomy predictions of the Tokyo summit communique, the developed and the developing world face economic recession more damaging than the great depression of the thirties. The communique spells out the consequences of the sharp price hike by the OPEC as "world-wide inflation and less growth that will lead to more unemployment, more balance of payments difficulty and will endanger the stability in the developing and developed countries alike". The media projections are even more pessimistic. These include steadily falling standards of living, the adjustment to which will generate industrial strife and social tensions shaking the foundations of democratic societies. Political upheavals and risks of war are no longer considered unthinkable. The United States' decision to establish a mobile special force of 110,000 men to "respond" quickly to an emergency in the Persian Gulf (which supplies 60 per cent of the oil requirements of the OECD countries) is taken as a preparation to seize oilfields in the region in the last resort to safeguard supplies. The West German minister of Economics has a different view. He has said that the revolution in Iran has brought forward the danger of war "not between oil producers and consumers but between consumers and consumers".

The harshness of president Carter's criticism of the OPEC on his return from the summit has been voiced more discreetly by the returning summiteers in Europe. Mr Carter's projection of oil price increases on the USA is to make "a recession more likely than it was before", an increase of 800,000 more unemployed, a drop of 2.5 per cent in the GNP and a rise of 2.5 per cent in the inflation rate and "zero" growth. The ominous hint in his statement that "there has been an excessive amount of timidity on the part of the consuming nations" reinforces the significance of the special oil task force being drafted in the USA. The reaction in west Europe is also compounded of anger and threat, though a military solution is ruled out except in extremis. The west is being called upon to stand up to the OPEC through political and economic counter-measures, including the raising of prices of food that oil importers buy through a system of quotas.

The extent of the economic damage to the OECD (20 of the most developed countries) from the latest oil price increases has yet not been worked out by governments and economists in Europe except tentatively. This is because the two-tier prices agreed at the OPEC meeting are not considered the end of the price spiral for this year. A factor responsible is the inability of Saudi Arabia and her "moderate" supporters, the United Arab Emirates and Qatar, though they jointly account for one-third of OPEC production, to restrain the ten other members of the cartel. The three moderates are to sell oil at the basic price of 18 dollars a barrel and the ten at between 20 and 23.5 dollars. The loss of Saudi dominance is due to the world shortage of supplies amounting to 1.5

(*Over to page 88*)

This is only an announcement and not a Prospectus

Announcement regarding issue of 7,54,300 Equity Shares of Rs. 10/- each for cash, at a premium of Rs. 2/- per share.

INTERNATIONAL I

(Incorporated as a Private Limited Comp
Limited Company on 16th M
Registered Office: 14

HISTORY AND BUSINESS OF THE COMPANY

The Company was promoted by Mr. N. Krishnan and was incorporated on 19th August, 1958 as a private limited company to carry on the business of manufacture of automobile dashboard instruments. He was further successful in concluding a technical and financial collaboration agreement with VDO Tachometer Werke, West Germany, the largest manufacturers of automobile instruments in the world.

In the last two decades, under the able and dynamic leadership of Mr. N. Krishnan, the Company has registered significant all round growth rising from a very small beginning. Today, the Company is having five plants and employs over 1,600 workers.

During 1969-78, the income shot up by 340% from Rs. 211 lakhs to Rs. 711 lakhs, the net worth doubled from Rs. 106 lakhs to Rs. 216 lakhs. The Company has made four bonus issues and has been paying regular dividends for the last 15 years.

The Company was converted into a public limited company on 16th May, 1979 and consequent to this, a fresh certificate of incorporation dated 21st May, 1979 has been obtained.

COMPANY'S PRODUCTS AND MARKET

The Company manufactures automobile dashboard instruments such as speedometers, ammeters, temperature gauges, oil pressure gauges, battery condition indicators, hour-cum-RPM meters, flexible drive shaft cables, dashboard switches, garage equipments and telephone dials. The products are marketed under the brand name of YENKAY and have earned the hallmark of quality and reliability.

EXPANSION AND DIVERSIFICATION

All the products manufactured by the Company enjoy a high degree of popularity and customer acceptance. Automobile industry including the two wheeler industry has taken up effective steps to increase their production and consequently the demand for the Company's dashboard instruments, cables and switches are registering a sharp upward growth. Presently, the Company is fully utilising its installed capacity in respect of its major products. In view of these demands, the Company proposes to expand its capacity. The Company has also planned to step up the production of telephone dial assemblies to meet the growing demand of Indian Telephone Industries Limited. Due to the increasing cost of maintenance of trucks and buses, the fleet operators in India including State Transport Undertakings are evincing keen interest in the fitment of tachographs and to meet this growing demand, the Company is expanding its production capacity of tachographs.

As a measure of diversification, the Company has decided to enter the field of ticket issuing instruments. These are devices providing for a simple to operate, fast and reliable means of ticket issuing. The Company has successfully entered into a technical collaboration agreement with Ticket Equipment Limited, U. K., who are the pioneers in the field. On 29th December, 1978, Ticket Equipment Limited was acquired by the world famous EMI Group of U. K. and is presently run in the name and style of EMIDATA TICKET EQUIPMENT DIVISION of EMI Industrial Electronics Limited.

PROSPECTS & PROFITABILITY

With the completion of expansion and diversification programmes the turnover of the Company is anticipated to reach around Rs 1300 lakhs by the year ending 1981, which will result in significant increase in profits. The Company is confident of maintaining the growth and barring unforeseen circumstances, the Company will continue to pay a reasonable dividend on the equity capital, enhanced by the present issue.

FINANCIAL HIGHLIGHTS

The following figures derived from the audited accounts of the Company highlight the performance recorded by the Company in its profitability and growth:

(In Rs. Lakhs)

	1974	1975	1976	1977	1978
Equity	84.50	84.50	118.12	118.12	124.57
Reserves	76.68	85.57	67.65	82.07	91.20
Income	444.16	439.11	654.39	600.95	711 60
Profit before tax	79.36	60.91	65.97	61.53	84.79
Dividend on Equity	10%	10%	10%	11%	12%

LOCATION OF PLANTS

Instruments Plant:
140, Hosur Road, Bangalore 560 034

Cables Plant:
Shivaram Industrial Estate,
7th Mile, Hosur Road, Bangalore 560 068

Switches & Telecommunication Plant:
Old Madras Road, Avalahalli
Bangalore 560 049

TIM & Electronics Plant:
MBT Compound, Bommanahalli Village
Hosur Road, Bangalore 560 068

Tachograph Plant:
Old Madras Road, Avalahalli,
Bangalore 560 049

PROJECT SITE:
Plot No. 2, Bommasandra Industrial Area,
Bangalore-Madras National Highway,
Anekal Taluk, Bangalore District.

BOARD OF DIRECTORS

MR. N. KRISHNAN,
2009, HAL II Stage,
Indiranagar, Bangalore 560 038
Chairman & Managing Director

MR. D. N. VATCHA,
"Heera",
30, Palace Road, Bangalore 560 052
(Company Director)

MR. L. G. VARADARAJULU,
"India House",
Trichy Road, Coimbatore 641 018
(Industrialist

MRS. CHITRA KRISHNAN
Survey No. 28/1, Old Madras Road, Avalahalli
Virgonagar P.O., Bangalore 560 049
(Company Executive)

MR. ALBERT KECK,
6236, Eschborn 2, Schone Aussicht 2,
West Germany
(Company Executive)

DR. ULRICH WOEHR,
637, Oberursel/Ts, Koehlerweg 24,
West Germany (Company Executive)

MR. K. BADRINARAYANAN,
Survey No. 28/1, Old Madras Road, Avalahalli,
Virgonagar P.O., Bangalore 560 049
(Director-Engineering)

MR. N. SUDHAKAR,
311/A, 1st Main, 8th Block, Jayanagar,
Bangalore 560 011
(Director & Chief Executive)

SECRETARY
MR. M.R. RAJAGOPALAN,
417-A, Lakkasandra, 15th Cross,
Bangalore 560 030

SHARE CAPITAL

	Nominal Value (Rs.)
A. Authorised: 25,00,000 Equity Shares of Rs. 10/- each	2,50,00,000
B. Issued, Subscribed and Fully Paid-up: 12,45,700 Equity Shares of Rs. 10/- each of which 9,68,260 were allotted as fully paid bonus shares	1,24,57,000
C. Present Issue: 7,54,300 Equity Shares of Rs. 10/- each for cash at a premium of Rs. 2/- per share	75,43,000
D. Out of the present issue, 54,300 Equity Shares of Rs. 10/- each for cash at a premium of Rs. 2/- per share have been reserved for allotment on the following conditions to employees/business associates of the Company provided that shares not taken up shall be added to the public quota:	5,43,000
(i) No person shall be entitled to be allotted more than 200 shares, and (ii) such shares shall not be transferred for a period of two years from the date they are fully paid-up.	
E. Now offered to Public for Subscription: 7,00,000 Equity Shares of Rs. 10/- each for cash at a premium of Rs. 2/- per share	70,00,000

TERMS OF PAYMENT

On Application Rs. 6
On Allotment Rs. 6
consisting in each case Rs. 5/- on Capital Account and Re. 1/- on Premium Account

Failure to pay the amount due on allotment will render the allottee liable to pay interest thereon from the date appointed for payment, to the date of actual payment at the rate of 12% per annum and also render the shares (including the amount already paid thereon), liable to forfeiture. The Board of Directors shall be at liberty to waive the payment of interest wholly or in part.

UNDERWRITERS/BROKERS TO THE ISSUE

The entire issue of 7,00,000 Equity Shares of Rs. 10 each now offered to the public for subscription at a premium of Rs. 2 per share has been fully underwritten as follows:—

Name and A
Underwriter/

A. INSTITU

**The Industr
Investment
India Ltd. (**
163, Backba
Bombay 400

**United Indi
Co. Ltd.**
24, Whites R
Madras 600

Unit Trust
Unit Trust of
New Marine
Bombay 400

Canara Ban
112, J.C. Ro
Bangalore 56

Syndicate
2nd Cross Ro
Bangalore 56

B. BROKER

BOMBAY

**Bhupendra
Devidas,**
Bhupen Char
Dalal Street,

Porecha Br
19, Stock Ex
Bombay Sam

D.S. Purbh
Stock Exchan
Bombay Sam

Harkisonda
Stock Exchan
5th Floor, Bo

L.K. Panda
Maharashtra
45/47, Bomb

Lewis and
Bank of Baro
Bombay Sam

Abhay D. N
Regent Cham
Nariman Poin

Batlivala &
Union Bank B

**Chimanlal J
Company,**
107, Stock E
New Building

Dalal & Bro
29, Stock Exc
1st Floor, Dal

Indulal Amt
53, Stock Ex
New Building

Jamnadas
Stock Exchan
2nd Floor, Bo

K.J. Shah &
19, Stock Exc
Building, Bon

M.K. Choks
Bank of Maha
45-47, Bomb

Maganlal T
23, Bhupen C
1st Floor, Dal

Narandas &
Union Bank B
Dalal Street

Narendra M
Room No. 18
Stock Exchan
Dalal Street

SAA/IIL/579

THE SUBSCRIPTION LIST WILL OPEN AT THE COMMENCEMENT OF BANKING HOURS ON WEDNESDAY, THE 18TH JULY, 1979 AND WILL CLOSE AT THE CLOSE OF BANKING HOURS ON SATURDAY, THE 28TH JULY, 1979 OR EARLIER, AT THE DISCRETION OF THE BOARD OF DIRECTORS OF THE COMPANY, BUT NOT BEFORE THE CLOSE OF BANKING HOURS ON FRIDAY, THE 20TH JULY, 1979.

Applications have been made to the Stock Exchanges at Bangalore, Bombay and Delhi for permission to deal in and for an official quotation for the existing Equity Shares of the Company as also those now being issued.

TRUMENTS LIMITED

9th August, 1958 and converted into a Public
under the Companies Act, 1956)
Road, Bangalore 560 034.

	Amount Underwritten at Rs. 12/- per Share
BANKS	Rs.
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	6,00,000
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oor, 00 021	60,000
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eet, Fort	60,000
& Co. Building, char Marg	60,000
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Marg, Fort	60,000
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uilding,	
	60,000

	Rs.
Suresh F. Gundaria, 87, Stock Exchange Building, Bombay Samachar Marg	60,000
Upendra M. Dalal, Room No. 100, Stock Exchange Building, Ground Floor	60,000
V.B. Desai, Bhupen Chambers, Dalal Street	60,000
Valji Bhimji & Co. 24, Stock Exchange Building Bombay Samachar Marg	60,000
Virendra K. Patel, 38, Bhupen Chambers, 9, Dalal Street, Fort	60,000
Jayantilal Khandwala & Sons, Room No. 6, Stock Exchange Bldg., 5-A, Ambalal Doshi Marg	60,000
DELHI	
J.C. Mehta & Co. 308, Dreamland, 1/18-B, Asaf Ali Road	1,20,000
Vinod Kumar & Co. A/6, Connaught Place	1,20.000
Amrit Lal Bajaj & Co. 606, Kailash 26, Kasturba Gandhi Marg	90,000
Bharat Bhushan & Co. H/45, Connaught Place	90,000
Raja Ram Bhasin & Co. Jewan Mansion, 8/4, Deshbandhu Gupta Road	90,000
Surinder Rode & Co. 21-B, Bara Bazar Marg Rajinder Nagar	90,000
Behari Lal & Co. 24, Stock Exchange Building, Asaf Ali Road	90,000
Dewan Chand & Co. Block10, Street-3 Devnagar, Karol Bagh	60,000
H.P. Mehta & Co. Surya Kiran, 3rd Floor, Kasturba Gandhi Marg	60,000
Harbans Singh Mehta & Co. 33, Regal Building, Parliament Street	60,000
Jalan & Co. Stock Exchange Building, Asaf Ali Road	60,000
L.R. Munjal & Company, 46, Stock Exchange Building, Asaf Ali Road	60,000
CALCUTTA	
Stewart & Co. 14, India Exchange Place	1,20,000
Place, Siddons & Gough (Private) Limited, 6, Lyons Range	90,000
G.M. Bosu, 7, Lyons Range	60,000
Khandelwal Bros. Wardley House, 25 Swallow Lane	60,000
Narayandass Khandelwal & Company, Wardley House, 25 Swallow Lane	60,000
MADRAS	
Paterson & Co. Vanguard House (III Floor), 11/12 Second Line Beach	1,80,000
Venkataraman & Co. Bombay Mutual Annexe, 165, Linghi Chetty Street	1,20,000
Swastik & Co. Mercantile Plaza, 373/375, N.S.C. Bose Road	60,000
BANGALORE	
M. Nanjappaiah Jahgirdar, 205, Cavalry Road	90,000

	Rs.
Bhagya & Co. 139, Gandhi Bazar, Near Canara Bank	90,000
Jahgirdar & Co. 21, Second Main Road, Seshadripuram	90,000
Alan J. Chaves, 19/3, Cunningham Road	90,000
K.K. Shenoy, Kalyani, 55, VI Main, 3rd Block, Tata Silk Farm	60,000
L.K.S. Murthy & Co. No. 17, Third Floor, Kempegowda Road	60,000
Lokkur & Co. P.B. No. 9631, Kempegowda Road	60,000
M.L. Gopala Setty, Block No. 2, 1st Floor, Bank of India Building, Kempegowda Road	60,000
Satyaprakesh & Co. Indian Bank Building, III Floor, Kempegowda Road	60,000
Vijai & Co. 9, Eleventh Main Road, Malleswaram	60,000
AHMEDABAD	
Champaklal Bhailal Chokshi, Manek Chowk, Near Share Bazar	1,20,000
Gordhandas N. Gupta, Anandji Kalyanji Building, Opp. Dhansuthar Pole, Relief Road	60,000
Nareshchandra Lalbhai Parikh, Manek Chowk	30,000
Shah Kalyanbhai Mayabhai, 2242, Mahurat Pole, Manek Chowk	30,000
HYDERABAD	
Laxminarayan Rathi, 4-5-173, Hashmat Gunj, Sultan Bazar	30,000
INDORE	
Santosh & Co. 29, Dhenu Market, 1st Floor, S.G.S. I.T.S. Road	30,000

The underwriting brokers are also acting as brokers to the issue

AUDITORS

M.S. KRISHNASWAMY & COMPANY,
Chartered Accountants,
141, 43rd Cross, 8th Block,
Jayanagar, Bangalore 560 041

LEGAL ADVISER

N. JAYARAMAN, Advocate,
No. 9, Vinayaka Building, 1st Cross Road,
Malleswaram, Bangalore 560 003

PRINCIPAL BROKERS TO THE ISSUE

PATERSON & COMPANY,
Vanguard House, 3rd Floor,
48, Second Line Beach, Madras 600 001

M. NANJAPPAIAH JAHGIRDAR,
205, Kamaraj Road, Bangalore 560 042

REGISTRARS TO THE ISSUE

N.D. MANAGEMENT SERVICES
PRIVATE LIMITED,
43, Sembudoss Street, 2nd Floor,
Madras 600 001

BANKERS TO THE COMPANY

Canara Bank,
2/114, N. R. Road, Bangalore 560 002

Syndicate Bank,
2nd Cross Road, Gandhi Nagar,
Bangalore 560 009

BANKERS TO THE ISSUE

BANK OF INDIA

28, Errabalu Chetty Street,
Madras 600 001

OR their main offices at: Agra, Ahmedabad, Allahabad, Amritsar, Bangalore, Baroda, Bhavnagar, Bombay, Calcutta, Chandigarh, Delhi, Ernakulam, Hyderabad, Indore, Jaipur, Jammu, Jamshedpur, Kanpur, Kollapur, Lucknow, Margao, Nagpur, New Delhi, Panaji, Pune, Rajkot, Surat.

CANARA BANK

Thousand Lights Branch,
3, Greams Road, Madras 600 006

OR their main offices at: Bangalore, Belgaum, Bombay, Bhubaneshwar, Bhopal, Calcutta, Calicut, Cochin, Coimbatore, Hyderabad, Karaikudi, Madras, Madurai, Dharwar, Ernakulam, Mangalore, Margao, Mysore, New Delhi, Patna, Panaji, Pondicherry, Secunderabad, Salem, Trivandrum, Tiruchirapalli, Trichur, Udipi.

GRINDLAYS BANK LIMITED

232, Netaji Subhas Chandra Bose Road,
Madras 600 001

OR their main offices at: Amritsar, Bangalore, Bombay, Calcutta, Cochin, Darjeeling, Gauhati, Hyderabad, Kanpur, New Delhi, Simla, Srinagar, Tuticorin.

SYNDICATE BANK

Armenian Street, Madras 600 001

OR their main offices at: Bangalore, Bhubaneshwar, Bombay, Bhopal, Calcutta, Cuttack, Faridabad, Gaziabad, Gwalior, Ludhiana, Patna, New Delhi, Vishakapatnam, Vijayawada.

CORPORATION BANK LIMITED

112, Armenian Street,
Madras 600 001

OR their main offices at: Bangalore, Bombay, Mangalore, New Delhi.

AVAILABILITY OF FORMS AND PLACES OF ACCEPTANCE

Application forms with copies of the Prospectus may be obtained from the Registered Office of the Company, Managers to the Issue, Registrars to the Issue, Underwriters, Brokers to the Issue and Bankers to the Issue as stated herein and in the application form.

Application forms duly completed together with cash/cheque/bank draft should be delivered before the closing of the subscription list to any of the bankers to the issue named herein or to any of their branches, a list of which is incorporated in the application form, and not to the Company or to the Managers to the Issue or to the Registrars to the Issue. **For further instructions, please read the Prospectus and the Application Form carefully.**

MANAGERS TO THE ISSUE

CIFCO

CHAMPAKLAL
INVESTMENT &
FINANCIAL
CONSULTANCY
LIMITED

Regent Chambers,
Nariman Point,
Bombay 400 021

ISSUE OPENS ON
18th JULY 1979

million barrels a day (MBD). The Saudis could partially make up for the shortfall, as they intend to do temporarily, but his would be no more than a gesture to he west as Iran, Iraq, Kuwait and Libya could further cut down their production without loss of revenue cushioned by rising prices. Indeed president Gadafy of Libya has threatened to cut all oil production for export for two or three years which means a reduction of supplies by two million barrels a day. If one goes strictly by the principle of supply and demand and market forces—which are what the OECD countries follow in most of their economic activities—the best investment for oil exporters is to keep as much of their finite reserves stored underground as their market value can only increase by leaps and bounds while exports on a diminishing scale will bring all the money they want.

western folly

There are other ways of OPEC members breaking through their agreed oil price ceilings. The credit period for oil payments, which is now 60 days, can be cut, as has been done by Saudi Arabia, Kuwait and Nigeria halving it to 30 days and thereby adding the interest for 30 days to the oil price. They could also ake advantage of the free market cenred at Rotterdam where the current market rate is 35 dollars a barrel. Nigeria has started to take advantage of what can only be considered the western counries' folly in competing for oil available n the free market, by changing the new contracts by charging half of the supply at the OPEC rate of $23.5 a barrel and he other half at spot Rotterdam market rates. This practice is expected to be adopted generally. There is no certainty, herefore, that price rise this year will be what has been decided upon. A more realistic percentage is much higher.

Taking, however, the OPEC two-tier price as the base, the extra money that he industrialised developed nations will have to find is 46,000 million dollars annually of which the OECD countries' share will be 30,000 million dollars. The OPEC surpluses will rise to 50,000 milion dollars which cannot be easily recycled and can only be partially absorbed by imports of manufactured goods, technical skills or arms. This will mean vast sums of money chasing secure and profitable investment in a world where recessionary trends would be widespread. The inflationary cost will vary. It may be slightly lower or much higher than Mr Carter's 2.5 per cent for the USA, the fall in growth rates will be general but also not uniform. But the USA's "zero" growth rate is the dark portent of what the west faces. The economic philosophy of continuous growth of GNP and standards of living would have had its day for the near future to be replaced by the aim of maintaining at least the level of economic activity already achieved. This amounts to a state of stagflation—where growth does not take place or is too little, and inflation, deficits in balance of payments and unemployment remain at high levels.

It is against this background that one must examine the summit's answers to the challenges of high cost energy and erratic supply. The most promising undertaking is to freeze oil consumption to the 1977 or the 1978 level till 1985 while embarking on an intensive programme of development of alternative sources, mainly coal and nuclear power and of research in other sources—wind, tides, solar energy, etc.

consumption cutback

The cutback in oil consumption, though modest, can only be achieved with sacrifices and stern political will in the democracies which have pledged to do so. The USA must make the greatest effort as its oil imports and energy consumption have grown since 1973 faster than other OECD countries, by 43 per cent in imports and 14 per cent in energy consumption compared with cuts of 20 per cent in oil imports and 10 per cent in energy consumption by EEC members in the same period. Japan, totally dependent on imported oil (and which has been allowed a small increase in imports up to 1985) has the capacity from her overseas trade and vast balance of payment surpluses to break the summit agreements by paying the prices demanded by the exporters. West Germany is in a similar position. The USA has also to fulfill the summit pledge of "keeping domestic oil prices at world market prices or raising them to this level as soon as possible." At present they are half the prices of petrol in western Europe, To bring them up to the world level will require the political will and the courage to withstand not only public hostility but even public anger and violence, which are prevalent in America today as motorists besiege garages and violence erupts. The danger of tensions arising from competition between consumers is evident in the American subsidy of five dollars a barrel for getting supplies from the Rotterdam spot market in defiance of criticism of west European countries. The former prime minister of Britain, Mr Edward Heath, has warned that the USA was going to be a major competitor for oil imports for years to come—"a fact which threatens the Atlantic alliance with severe tensions".

search for alternatives

Undoubtedly the energy crisis will give a push to the development of alternative resources, particularly coal and nuclear power. The immediate summit aftermath in western Europe has been the go-ahead for crash programmes of expansion of nuclear power generation. While environmental safeguards are to be taken, the fears aroused by the Harrisburg nuclear accident in the USA are being devalued as the conviction grows that without nuclear power expansion, economic growth will be hard to achieve. Coal, the most plentiful energy source, is also getting a boost in plans announced for more investment in technology for substituting coal for oil in the industrial and electrical sectors. The sources which require many years or decades to become commercially viable, such as wind, tides, geo-thermal and solar energy, are also to be taken up for development by bigger investment in research and new technologies.

But all these will not immediately help tackle the oil crisis of supply and prices. Only conservation and reduced consumption can help. The targets fixed by the summit are moderate, but even here there are doubts whether they will be implemented. National considerations come to the fore when domestic economies and standards of life are under threat. To Mr Heath's expectation of tension in the NATO from American thirst for oil, should be added the possibility of Japan and China getting closer together in mutually beneficial economic partnership (with political implications). China's oil reserves, according to the latest western assessment, now exceed those of Iran and exportable surplus could make up for much of the oil Japan needs.

Western democracies face another difficult problem in trying to convince their trade unions—and people—that they must accept lower standards and not attempt to counter the oil induced inflation by higher income demands. The British coal miners have put in a demand for 65 per cent increase, backed by threat of strike action. It was the coal miners' strike which brought down the previous Conservative government. If the claim is conceded even in part, then the railwaymen, engineering and electrical workers, indeed the entire work-force have made it clear that their deferentials should not be eroded by what the miners get. A similar tendency is indicated in the EEC and much of the OECD region. This is where dogma conflicts with reality. Mrs Thatcher won the election on a programme which included "free collective bargaining". But if the unions cannot be persuaded to restrain demands, then a statutory income policy will become inevitable with its potential of industrial strife.

Although the Soviet bloc has managed to weather the storm felt by the west, it too stands to be equally affected in a few years' time when Russian production begins to be inadequate for the needs of the Comecon countries. It is significant that at the annual Comecon meeting in Moscow, the Soviet minister, Mr Pyotor Nepotozhni, assured the members that "they can look forward to adequate supplies for the next five years." He did not say what comes then. But a save energy campaign started in the Soviet Union calls on citizens to cut waste and teams of experts are to survey industrial projects to check fuel economy. It appears that the crunch has begun in the Soviet bloc.

How will the oil price rises affect India and the other developing countries? As usual they will be the greatest sufferers as they do not have the economic fat that developed countries can shed without too great an impact on their peoples (except on their extravagance). Western assessments pinpoint the greatest impact will be on countries in the process of industrialising or modernising agricultural operations, in both of which India is in the forefront. India's oil bill is expected to go up by over 66 per cent. But, even then India is better placed to mitigate though not overcome the consequences than most other oil importing developing countries. The OPEC aid which may exceed 6000 million dollars annually to the Third World is totally inadequate and is also unevenly distributed—the major part going to fellow Islamic countries.

The Tokyo summit expressed deep concern for the hundreds of millions below the poverty-line in the developing world who will be further impoverished by the OPEC price rises. Its communique promises to step up efforts to help these countries to develop human, agricultural and energy resources. But it is to be seen to what extent this pledge will be kept as the summiteers and others in the developed world begin to feel the pinch of the energy shortage.

Promoting growth with equity

R. K. Rath

There has no doubt been considerable development during the past two decades but the growth has neither been universal nor uniform. Past successes, according to the author, who is joint secretary and land reforms commissioner in the central ministry of Agriculture and Irrigation, should not be overrated and it will be inexpedient to project future food availability on the basis of occasional increments. It should be remembered that there has been a steep increase in the number of the under-nourished people. The author however feels that mankind is capable of handling the crisis of economic and social deprivation if it is morally aware of its dimensions.

THE ENORMITY of poverty, especially rural poverty, in developing countries does not need elucidation. The mid-1976 population of developing market economies stood at about 2,110 million. Nearly 800 million or about 40 per cent of this population live in absolute poverty. Four further facts have to be noted. First, 34 low-income developing countries account for about 58 per cent of the total population of all developing countries and about 30 per cent of the world's population. Second, four Asian countries (Bangladesh, India, Pakistan and Indonesia)—all in the low-income group—hold nearly 43 per cent of the population of all developing countries and nearly 75 per cent of the population of all low-income countries. Third, the bulk of the poor live in rural areas and will, notwithstanding the rapid urbanisation under way, continue to do so for as long as we can see. Last, it is unlikely that agriculture's pre-eminence in a large number of low-income countries, especially in the four countries listed above, will decline perceptibly in the foreseeable future.

It is unnecessary to try to estimate the number of the absolutely poor at the end of the present century. This would depend on a variety of factors, chiefly on the success of poverty-alleviation programmes undertaken in the next two decades. We may, however, note that developing market economies are estimated to have, at the end of the century, a population of about 3,500 million (2,000 million in the low-income countries and 1,435 million in the four Asian countries mentioned above).

The poor are already very numerous, and will be more so 20 years from now. This, by itself, is logic enough for urgent and specific poverty-correction efforts, but somehow evidence of the restless activity that is clearly imperative is lacking. There has been, admittedly, considerable improvement in the quality of life in developing countries during the last three decades; the size and intensity of poverty would, it must be conceded, have been far larger but for efforts to contain it. However, the problem of poverty not only persists, it threatens to acquire new and enormous dimensions unless it is countered far more vigorously than in the past.

It is probable that past success in alleviating poverty in some countries and in ome pockets in other countries which ontinue to have large deprived populaons has occasioned some complacency. his is a dangerous state of mind; motiation is replaced by credulity, and the aind is persuaded into the hope that arlier success stories will repeat themelves endlessly on their own. Conditions ontributing to earlier successes may be otally absent and their may be entirely ew constraints on economic growth.

It is useful to dwell on past experiences f success for some time and try to undertand their overall significance and consraints on easy replication. The miraculus economic growth of Japan, Taiwan or e Republic of Korea after World War I took place under circumstances which, will be conceded, were peculiar and ould not therefore constitute a basis for uture plans. These three countries have, etween 1960 and 1976, experienced higher rowth rates in industry relative to agriulture and an exceptionally high growth ate in exports. Their utility as models for ow-income countries with a substantial gricultural sector is very limited.

neck-and-neck race

Developing countries, as a group, have o doubt increased their food production etween 1960 and 1976, but this is no reat satisfaction, The growth rate declind during 1970-76 relative to 1961-70 oth in the group as a whole and in he most seriously affected (MSA) counries. The rate of population growth luring 1970-76 in the group as a whole lmost caught up with the growth rate in ood production and, in the MSA counries, actually outstripped it.

The fourth World Food Survey analyses he situation as follows: "During the 960s, 56 out of 128 developing countries xperienced population growth rates igher than food production rates, with he consequence that their per caput food roduction declined. During the 1970s, he number of these countries not only ose to 69, but these countries now inlude highly populated countries such as ndia, Pakistan, Mexico and Egypt." In he result, there has been a steep increase n the number of under-nourished people, wo-thirds of whom live in the MSA countries and more than half in the countries of the east Asian region.

Past successes in increasing food production appear to have been very much over-rated. Perhaps the countribution of new areas brought under the plough has not been sufficiently acknowledged. Further, it was inevitable that the new seed-fertiliser technology should have occasioned immediately after its introduction, pronounced production gains which would, as the years went by, level out and exhibit normal growth trends. This is illustrated by the following example from India.

higher incremental yields

High-yielding wheat varieties gained rapid acceptance in north India and, in 1967-68, there was a record production of about 16.54 million tonnes which was 48.6 per cent higher than the average annual production during the preceding six years and 35 per cent higher than the earlier peak production (in 1964-65). The average growth in production between 1954-55 and 1964-65 was about 2.9 per cent per annum. After the peak production in 1967-68, the growth rate till 1977-78 was about 5.7 per cent per annum. There, no doubt, was a higher incremental yield rate (about 2.5 per cent contrasted with less than 1.5 per cent between 1954-55 to 1964-65), but the cropped area also grew faster (by 3.1 per cent contrasted with about 1.4 per cent during the earlier period) and there was large-scale diversion of newly irrigated areas to wheat.

The intention here is not to disparage the importance of technology accounting for incremental production. There is no alternative to production-raising technology which must find wider and quicker acceptance in developing countries. It will, however, be inexpedient to project future food availability on the basis of ocassional increments which can be significantly larger than long-term increments and which can, unless interpreted correctly, prove costly delusions. While wheat production, as we have seen, increased annually at about 5.7 per cent between 1967-68 to 1977-78, India's total foodgrains production increased far more slowly—at 2.4 per cent—during this period.

Moreover, the overall production in a country has only limited significance for its disadvantaged regions and people. Different regions in a country differ widely in their resource endownments. If production gains are insignificant in specific regions, people in these regions will have limited income and consumption gains, significant gains in other regions notwithstanding. We have referred earlier to the disparity between growth in production of wheat and in total foodgrains production. Production of rice which commands more than twice the area under wheat and is the country's principal food crop increased even more modestly than all foodgrains. While nearly 92 per cent of India's wheat area was under high yielding varieties in 1976-77, the corresponding percentage for the rice area was 34.50.

regional variations

There are naturally, markedly different conditions in rice and wheat regions. Even within a single crop region, the production is far from uniform. In 1975-76, for example, paddy yield per hectare averaged 1,877 kgs in the country but while the states of Tamil Nadu and Punjab produced 3,255 kgs and 3,867 kgs on an average, the yield rate in Bihar, Orissa and Uttar Pradesh was around 1,400 kgs, that is, less than half of what Tamil Nadu and Punjab produced. Such regional variations occur in respect of all food crops. Even within a region, yield rates fluctuate enormously in different areas and in different crop seasons.

Regional variations, therefore, are important both internationally and within a country. Since out-migration is infrequent in agricultural societies, people in underdeveloped regions have to resign themselves to a situation of low production, low income and resultant deprivation. The insufficiency of marketable surplus in these regions results in low purchasing power of the people who are unable to afford sufficient food even if there is adequate food in the market. The first and worst victims of the Bengal Famine (1943-44) were agricultural labourers and small farmers whose purchasing power was so seriously impaired that they could not, even when food was available, afford it. It is not unusual, even now, to come across pockets of acute scarcity and hunger while there is, in other pockets in the region and the country, a reasonable sufficiency of food.

Incremental food production, it is clear, will not be automatic and will need to be organised very extensively. It is also clear that efforts will have to be made to equalise, as far as possible, access of different regions within a country to improved production conditions and to new production technologies. The neglect of this task cannot be compensated by exceptionally accelerated gains in production in some regions. If incomes were higher, and were derived from non-agricultural vocations, it may have been possible to match, fairly satisfactorily, the overall demand for food with its overall supply and to develop regional specialisation in specific economic activities. Since this is not the case in the larger number of developing countries, there is perhaps no alternative to increasing food production in every region.

This is not easy. Since regions differ in resource endowments, planning will have to aim at correcting, to the extent possible, disparities in these endowments. Entirely new political and administrative skills will be necessary in order that remediable disparities are identified, appropriate measures to supply these deficiencies are formulated, implementation of programme is not frustrated by deficient infrastructure or resources and, above all, allocation of funds for these programmes receives political acceptance. Moreover, since some of the resource deficiencies would have been occasioned by nature, it would not be possible to equalise conditions in all regions. Great innovative skill will be needed to devise growth strategies for different regions so that their disparate resource endowments do not result in disparate levels of well-being,

In order that this happens, national governments and the international community must evince far greater commitment to promoting growth with equity. Man's mind is capable of extraordinary alertness and ingenuity in moments of crisis. Without much loss of time and without much articulation, it reorganises its behaviour and takes control of a situation instead of responding passively to events. The only prerequisite is awareness of the crisis before it becomes uncontrollable and overwhelming. Mankind is capable of handling the crisis of economic and social deprivation of very large numbers of people if it is morally aware of its dimensions and does not allow itself to be lulled into inaction by fairy tales of success.

Health hazards of water pollution

R.B.L. Garg

Water pollution is a very serious issue which requires to be tackled expeditiously lest it gets out of control. This is urged by the author who is lecturer, postgraduate department of Business Administration, M.S.J. Government College, Bharatpur. He has dilated on the nature and intensity of the problem and suggested that prevention of pollution should be a central subject because many states have failed to pass the legislation on contamination of waters and pollution of air.

THE INTERNATIODAL Institute of Applied Systems Analysis of Austria has recently warned that unless sewage and sanitation facilities are improved, (water pollution) will surely become India's major problem in 25 years. There is hardly any doubt that the dangers of water pollution are rapidly mounting in every part of the country and if adequate steps are not taken, it is bound to be a major health hazard. The worst affected, however, are the industrial cities and rapidly growing isolated industrial centres, although the ill-effects of water pollution are being equally shared by the rural areas. Most of our rivers are being polluted increasingly by the uncontrolled discharge of effluent from paper and textile mills, tanneries, sugar distilleries, coal washeries, hydrogenated oil mills, petrochemicals and pesticides plant. In many places water has become unfit for human consumption. The epidemic of jaundice which struck the inhabitants of Bombay last year and those of Gwalior a few months back, amply testifies to this fact.

Bombay is the most affected part of the country followed by Calcutta as far as water pollution is concerned. Greater Bombay boasts of housing 15 per cent of the total industrial activity and almost one half of the chemical industries in the country. The small streams and creeks in the Thana-Kalyan region near Bombay carry water highely tainted with synthetic dyes which include chlorinated organics and mercury-cadmium. The major sources of pollution of water around the Bombay islands is the oil slick in the harbour caused by hundred of ships unloading their waste oil and other pollutants. The second largest source of water pollution around Bombay also finds its way to the creeks and to the sea without treatment. The beaches around Bombay have thus become polluted to an extent beyond tolerance limits.

In 1977 the Maharashtra government was forced to declare the coast from Colaba to Mahim a contaminated area. Because of the layer of oil-spread near Butcher islands, if ever a ship catches fire near the islands, the fire could spread throughout the Bombay harbour. A public health engineer calculated that it will take over 100 years to clean up the area. The creek receives 328 million litres of waste matter from domestic sewage and 2115 million litres of liquid industrial waste every day. The two refineries constructed at Trombay dump their circulating salt water used for cooling into the creek. Oil slicks from ships among the oil route from the Gulf to south-east Asia, poor sewage disposal facilities in Greater Bombay and unchecked industrial effluents have polluted the coast north of Colaba district.

A recent survey conducted by the National Environment Engineerrng Research Institute (NEERI) has described the 140-mile Asansol-Durgapur-Calcutta stretch of Damodar river as one of the most polluted rivers containing all toxic matter. Some 8.6 million gallons of waste water flow into the Hooghly river from industries on its banks. Recent reports indicate that Ganga and many rivers in the states of Kerala, Karnataka and Orissa are heavily polluted, resulting in the destrucon of aquatic life besides render-g the water unfit for drinking. Extensive boratory tests of the Ganga water con-ucted by Banaras Hindu University have own the water to be saturated with rms and deadly chemicals. Yamuna kes every day 20 million odd litres of dustrial effluents discharged by the rious Delhi based industrial units,

More than 500 million litres of indus-ial effluents are being dumped daily into e rivers of Kerala besides untreated man waste. Waters at 'Kuttanad', the ce bowl of Kerala, have been severely olluted by massive application of pesti-des in paddy fields. The Chaliyar which pplies drinking water to Calicut city as the worst polluted until the state overnment ordered the closing of Gwalior. ayons factory at Mavoor that was let-ng out 548 lakh litres of waste per day to the river.

health hazard

A survey carried out by the Punjab oard for Prevention and Control of Vater Pollution shows that over 40 per nt of the hand pumps in Habobal Kala village on the outskrits of Ludhiana) ontain contaminated water not fit for man consumption. This village is tuated on the bank of the stream known Budh Nala which passes through udhiana. It carries polluted water of 17 ains of the town with the result that the b-soil water on both sides of the stream as become polluted. Gurgaon canal hich was recently constructed at a cost Rs 12 crores, has become a health azard for scores of villages in and around aridabad complex. The factory wastes Okhla and Faridabad that flow into e canal have not only polluted the canal ater making it harmful to the plant life, s seepage has contaminated the under-ound water resources. Almost all the vers in Bihar except Loel and Karo are eavily polluted by waste from steel plants, al washeries, thermal power plants, eavy Engineering Corporation, fertilizer nits and a number of chemical industries.

While no reliable data regarding the agnitude of water pollution are available, cording to one conservative estimate the lume of waste water generated by rious manufacturing units is 50,000 to 0,000 gallons per tonne of paper; 20,000 gallons per tonne of strawboard; 1,500 to 2,000 per tonne of ammonia or urea in fertilizer; 600 gallons per 1,000 lbs of molasses in sugar mills and distilleries; 700 to 1,000 gallons per tonne of steel and 350 to 450 gallons per tonne of oil processed in refineries. Effluents from industries have changed the colour of the waters of several southern rivers that were crystal clear a few years ago. The Damodar is black, the Chaliyar in Kerala is brown and the Bombay creeks are anything but their original blue.

minamato menace

Exact evaluation of social cost of environmental pollution in general and water pollution in particular might be a massive task. It is true, however, that such a cost is immense. In Japan a fast rate in growth in industries without any provision of controlling the pollution menace in the initial stages led to the outbreak of a disease in which bone became brittle. At Miamata Bay as many as 500 people died after consuming fish affected by pollution. Just outside Bombay, residents of Ambarnath live in fear of minamato disease which crippled and killed Japanese in the sixties. The germs of the disease have been noticed in two places in waters and sediments of the Thana creek in Bombay and Rushikulya river in Orissa.

According to Mr S.K. Roy, a UN environment expert, 60 per cent of manhour losses were due to infectious diseases and 15 per cent of TB incidence among industrial workers was due to pollution and contamination of water by several chemicals. A working group for the fifth Plan estimated that 110 million people in India suffered from water-borne diseases. While malaria is the most prominent followed by intenstinal infections like cholera, typhoid and such other diseases it has been estimated that about 53 per cent of the nutrition in food consumed was lost through ailments like hook-worms, amoebic dysentery and other worm infections. The incidence of water-borne diseases is rising rapidy in Bombay, Delhi, Gwalior, Calcutta and other industrial cities. The recent outbreak of jaundice in Bombay is a case in point.

The Water (Prevention and Control of Pollution) Act was passed in 1974 to provide for regulation and control of water pollution and thereby maintain and restore the wholesomeness of national waters. Unfortunately the act does not extend to the whole country. As water is a state subject, the central enactment has come into force in only 14 states which have given consent to the act. It is, therefore, felt that only a comprehensive legislation containing provisions for the prevention and control of pollution of air, land and water throughout the country under the jurisdiction of the central government may be more effective. Leaving the problem to be solved by the states will be unwise. It is heartening that some international organisations (IBRD and UNDP) are coming forward to help curb the problems of pollution in the developing countries particularly this country where the situation has been accentuated of late.

Needless to say, industry and trade have a moral responsibility to ensure that their activities do not pose a threat to society, but the problem cannot be tackled without government assistance. It is, therefore, a duty of the government to see that the country does not suffer from want of expertise. The active involvement of the people and social organisations is essential not only to monitor regulatory agencies once new laws are passed but also to act as watchdog against possible acts of omission and commission by the implementing agencies.

all-out war

Water pollution is a very serious issue which requires to be tackled expeditiously lest it gets out of control. It however requires the cooperation of all sections of the society, industry, local bodies, social organisations and the public at large. It should also be remembered that it is not only a problem of pure water but of wholesome water. In the recent months several seminars and conferences have been held to highlight the dangers of environmental pollution and need for corrective action. While they have their own importance in evoking public interest in the problem of pollution, they should not remain purely academic and monotonously repetitive. India has a unique opportunity to plan its industrial growth in full harmony with nature. But it will require planned efforts by all those interested in maintaining ecological balance.

TRADE WINDS

Advances Against Sensitive Commodities

In the context of the present general rise in prices, particularly in the prices of some sensitive commodities, despite comfortable supply position, the Reserve Bank has advised the commercial banks to keep a strict vigilance on advances against these commodities in order to check any tendency to utilise bank finance for hoarding them. The following steps have been indicated for adoption by banks:

Sugar: Clean limits of Rs 25 lakhs permitted for the 1978 season to sugar manufacturing units should be withdrawn, and it should be ensured that the loans are repaid expeditiously. Credit drawn by sugar factories for holding stocks of sugar should be reduced in line with the release of stocks from factories. Margin requirements on all advances against sugar should be raised by 10 per cent; consumers' cooperatives holding stocks under the public distribution schemes organised by government are, however, exempt from this requirement.

The revised margins are 75 per cent in respect of each credit limit granted to parties other than those manufacturing sugar and parties manufacturing sugar in respect of stocks released for sale by government which have left the factory or mill premises and on which excise duty has been paid; 65 per cent in respect of each credit limit granted against warehouse receipts issued by central or state warehousing corporations; and 25 per cent in respect of credit granted to parties manufacturing sugar other than those released for sale which have left the factory and on which excise duty has been paid.

Oils and Oilseeds: Banks should refrain from granting additional limits against vegetable oil and oilseeds to parties against stocks of sugar other than government and government supported organisations; even in the case of such organisations strict scrutiny on drawals should be maintained.

Pulses: Minimum margins of not less than 45 per cent (as against the existing 35 per cent) on advances against pulses should be levied for processing units and of not less than 60 per cent for 'other'. Advances against warehouse receipts may be charged lower margins of 40 per cent and 50 per cent, respectively.

Commercial Banks and Rural Bonds

The Reserve Bank has advised the commercial banks that they may invest in the National Rural Development Bonds (to be issued by the government of India) only for the purpose of availing of the benefit of exemption from capital gains accruing on the transfer of capital assets under Section 54-E of the Income-tax Act. The banks should not hold these bonds as part of approved securities for the purpose of maintenance of statutory liquidity ratios under Section 24 of the Banking Regulation Act, 1949; acquire such bonds by purchase, transfer or otherwise from any subscriber or holder of the bonds; and grant any loans or advances against the security of such bonds for a period of three years from the date of subscription to, or purchase of, such bonds by the borrowers.

IDA Loan for Fertiliser Project

A loan of $250 million to support the construction of a fertilizer plant in India was approved by the World Bank recently. This project is the tenth Indian fertilizer project to receive assistance from the World Bank and its affiliate, the International Development Association (IDA). Under the project, which will require an investment of some $812 million, fertilizer manufacturing plant will be constructed at Thal, in Western Maharashtra. The plant will consist of two natural gas-based amonia units and three urea units, as well as auxiliary facilities, such as steam boilers and power generators, maintenance shops and facilities for product handling and storage. The ammonia units will be the largest steam reformation plants to be built in India.

The project also includes the provision of infrastructure such as road improvement, water supply and a power line. Rail sidings will also be constructed to provide the utilities for the project and to make possible the efficient movement of materials to and from the plant. A new township will be built nearby to house the plant staff.

In addition, a study will be carried out to plan for timely availability of the facilities and services required by the region as it develops further. Environmental aspects have been carefully reviewed to ensure that the plant will not adversely affect the region and adequate provisions have been made to ensure the control of effluents. The plant, which should be commissioned in 1983, is expected to produce 2,700 tons of ammonia and 4,500 tons of urea per day at full capacity. India's present fertilizer production lags behind consumption and the gap is filled by imports. This project will thus make possible annual foreign exchange savings of about $200 million.

More Workers Under Provident Fund

Over ten million industrial workers employed in 90,000 establishments and 623 collieries have been now covered under the provident fund schemes The coverage is being progressively increased to other areas to bring more and more people under its benefit. As many as 2,444 establishments and about 2.0 lakh subscribers were covered during 1978-79. To provide long-term protection to the workers and their families the Family Pension Scheme and the Deposit Linked Insurance Scheme was introduced. The family pension scheme was introduced in 1971 to afford regular income by way of pension to families of workers in case of their premature death. Nearly 4000 families are receiving benefit under the scheme.

The Deposit Linked Insurance Scheme, started in 1976, provides the nominee an additional amount equal to the average balance in the provident fund account of the deceased during the preceding three years or during the period of his membership whichever is less. The maximum amount of benefit payable under the scheme is Rs 10,000. The total number of claims settled under the scheme are over 3500.

GSFC

Record sanctions and disbursements, larger assistance to small-scale industries in the backward and rural areas were some of the highlights of the performance of Gujarat State Financial Corporation (GSFC) in 1978-79. This was stated by Mr B.R. Patel, chairman of the corporation in his address at the 19th annual general meeting of shareholders at Ahmedabad. Mr Patel mentioned that the corporation has sanctioned gross financial assistance consisting of loans and underwriting of shares amounting to Rs 28.48 crores recording a growth of 15.28 per cent over last year.

A record disbursement of loans of Rs 18.74 crores was achieved in 1978-79 showing a rise of 33 per cent over previous year. This rise in disbursement improved the sanction-disbursement ratio to 75.56 per cent as compared to 63.69 per cent in previous year.

Customs on Scrap and Ferro-Nickel

Ferro Alloys including ferro-nickel is at present exempt from basic customs duty in excess of 30 per cent ad valorem only. Representations were received from the trade that the customs duty on nickel oxide sinter should be the same as applicable to ferro-nickel, since prices of these two articles are mainly based on the nickel content in it. After careful consideration, the government has decided to equalise the customs duty on ferro-nickel and nickel oxide sinter to the level of 40 per cent ad valorem basic. The relevant notification is effective from June 30, 1979.

Melting scrap used in production of steel by the mini-steel plants is in short supply. Imports are being arranged to reinforce the supply. Considering the high prices abroad and with a view to making the imported melting scrap available to mini-steel plants at reasonable prices, the government had exempted melting scrap of iron and steel (other than heavy melting scrap of iron and steel) from the whole of additional duty leviable thereon until June 30, 1979. Considering the need to continue import of melting scrap for some time, the customs duty exemption has been extended upto March 31, 1980.

FCI Earns Despatch Money

The Food Corporation of India (FCI) has earned over Rs 4.5 lakhs in foreign exchange by way of despatch money since July last at the new port of Tuticorin alone through export of wheat which was undertaken at this port for the first time last year. The despatch money earnings became possible for loading vessels ahead of the normal allotted time for the purpose because of proper planning and timely movement of adequate men and material required for export work as well as due to improved facilities available at the ports, according to Mr M. Pichamuthu, senior regional manager, FCI, Tamil Nadu. About 1.3 lakh tonnes of wheat had been exported to the USSR and Vietnam during the last 12 months through Tuticorin port. Five vessels carrying over 33,000 tonnes of wheat sailed off from Tuticorin port to various destinations in the USSR. Export of wheat to Vietnam through this port was around one lakh tonnes and for this purpose 12 ships called on at this port.

Drinking Water for Problem Villages

People living in another 113,000 problem villages will be able to enjoy the facility of drinking water by March, 1982. For this purpose, Rs 80 crores will be spent during 1979-80 under the centrally sponsored accelerated rural water supply programme. This information was recently given by Mr Sikander Bakht, minister for Works, Housing, Supply and Rehabilitation, while speaking at the meeting of the consultative committee of members of parliament attached to his ministry.

The accelerated rural water supply programme was launched by the government in 1977-78 under the minimum needs programme for which a separate fund has been earmarked to supply potable water in problem rural areas. The members of the committee were also informed that the government would spend Rs 500 crores on various rural housing schemes during the current five-year plan.

Monthly Sugar Quota

A spokesman of the ministry of Agriculture and Irrigation recently reiterated the government's decision to enforce strictly the order which came into effect on July 1, 1979, requiring every sugar mill to sell and despatch 1/5th of its monthly sugar quota released for domestic consumption in each of the four weeks of the month to ensure an even flow of sugar throughout the month and its availability to consumers at reasonable price.

The spokesman was commenting on doubts being expressed in certain quarters about the capacity of the government to enforce this order because of the absence of any punitive provision in the event of its contravention. He pointed out that this order had been issued in exercise of the powers conferred by Clause 5 of the Sugar (Control) Order of 1966 which, in turn, had been issued under Section 3 of the Essential Commodities Act, 1954. The penalties for contravention of any order issued under Essential Commodities Act, 1955 would, therefore, apply to the order requiring a minimum sale and despatch of 20 per cent of the monthly sugar quota every week and utilisation of the entire quota during the month.

Autocamping

A new type of car-top, tent, which makes autocamping easier than ever, has been designed and built in Australia.

Called the Baron Highriser, it has a fibreglass container, with sides like halves of suitcase, which rides on the top of car or van. Containing a tent, two mattresses each measuring 1.8m×1.2m×75mm (6 feet×4 feet×3 inches), pillows and sleeping bags, it rapidly unfolds into a tent capable of sleeeping four people. It was designed and built by a Melbourne fibreglass engineer, Mr Rod Eakins in two versions.

Vizag Fishing Harbour

The slipway of the Visakhapatnam Fishing Harbour has been commissioned. First of its kind on the east coast, the slipway will meet the repair needs of the fishing vessels. It has been built indigenously at a cost of Rs 95 lakhs. The slipway complex has six repair tracks for accomodating six trawlers at a time, four cradles to move the fishing vessels and a workshop. It can haul-up trawlers up to 300 tonnes weight, with a length of 30 metres and draft of four metres. The first vessel to make use of the facility was the Andhra Pradesh Fisheries Corporation's 120-tonne trawler 'Kakateeya', which was successfully docked, repaired and floated back.

Swiss National Fair

From September 8 to 23, 1979, Lausanne will once again be holding the Swiss Comptoir which this year is celebrating its 60th anniversary. Some 2,500 exhibitors, spread over a total area of approximately 1.600.000 sq ft will be presenting a wide range of the products of light industry, agriculture, wine growing and craftwork. Down through the years, the national fair, well aware of how vital it is for a small country like Switzerland to open its frontiers to the world, has acquired an international importance and influence thanks in particular to the official participations of other countries welcomed as guests of honour. This year, authorities are proud to welcome two longstanding economic partners of Switzerland: Yugoslavia, whose first official participation in the Swiss Comptoir in 1962 was particularly successful, and Indonesia, the vast archipelago of the Sunda Islands, which become a republic in 1945.

Proud of its farming origins, the Swiss Comptoir intends to preserve and make the most of its connections with the soil by organising throughout the duration of the fair large shows of horned cattle, horses, small livestock, bees and rabbits. A big international dog show, which has come to be ranked among the largest of its kind in Europe, is added to the long list of shows of pets of various kinds. A sector for wines and winegrowing rounds off the agricultural economy display.

Lufthansa

After almost two weeks of interruption, Lufthana German Airlines has resumed DC-10 operations. During the special checks carried out by all possible methods and with extreme precision on all Lufthansa DC-10 aircraft, no faults due to maintenance or structural defects were found. This corresponds with the results of checks carried out by all other European airlines using the DC-10 aircraft. According to latest investigation results, the faults discovered in some DC-10 aircraft in the United States, are not due to metal fatigue but rather due to influence not related to the design or the construction of the aircraft. Procedures used by Lufthansa and other European airlines preclude such damage.

Trade with Canada

Indian firms have secured US and Canadian orders worth Rs 80 lakh for bench vices, machine vices, clamps, door hinges, other hardware items etc. The orders were booked during the course of a contact promotion programme undertaken by the Trade Development Authority for boosting their exports. Under this, a six-member team visited the US and Canada to study in detail the market requirements of all types of vices and hardware in these countries. The team, which inlcuded five industry representatives, was led by a senior TDA officer. The programme was aimed at identifying appropriate marketing channels, specific areas and products in which there is considerable export potential in the US and Canada and providing live contacts to the Indian industry for marketing their products.

The team visited important industrial and trade centres in the US and Canada. More than 100 leading importers, wholesalers, industry and trade houses etc. were contacted by the team and shown Indian samples and product catalogues. A number of new trade and business contacts were established. Samples of the US and Canadian products have been brought by the team to study and evaluate their dasigns and undertake product adaptation in Indian units.

Thai Contract for Triveni

Triveni Structurals Limited (TSL), a public sector unit under the department of Heavy Industry, has won an international contract from Thailand for design, fabrication, supply, erection and commissioning of hydraulic structures and mechanical equipments for Lower Quae Yai Regulating Dam Project of the Electricity Generation Authority of Thailand (EGAT). The value of the contract is Rs 2.10 crores. Under the contract, TSL shall supply five spillway gates, four intake gates, hoists, trash racks and road bridges. The project is to be completed by January, 1981. The TSL is confident of completing the job on time. Triveni Structurals Limited won the tender against stiff competition from a number of Japanese and some international firms of repute, after it had established its design superiority and competency to undertake this work. Earlier, TSL had successfully completed several international contracts, particularly in the field of hydraulic structures. TSL built projects have already been commissioned in Zambia and Tanzania.

Houses for the Handicapped

The Housing and Urban Development Corporation (HUDCO) has decided to allocate funds for construction of houses for physically handicapped and mentally retarded children as its contribution to the welfare of such children in the International Year of the Child. Hudco's assistance for construction of houses for handicapped children will be available at low interest of five per cent payable in 20 years. These loans will be available to charitable trusts, registered societies and similar institutions who are authorised by the concerned state agencies and permitted by their charter to undertake such activities.

Names in the News

Mr M. H. Mody has been elected as the alternate president of the Associated Chambers of Commerce & Industry of India (ASSOCHAM) for the year 1979-80. Mr Mody was president of the Bombay Chamber of Commerce & Industry and is currently the president of the Maharashtra Economic Development Council. He is the chief executive of Tata Sons Ltd and director of Tata Industries Ltd, Tata Burroughs Ltd, etc. He is a professional accountant and is on the boards of directors of a number of companies and a member of important national and international advisory bodies on commerce and industry.

COMPANY AFFAIRS

Hindustan Lever

Mr T. Thomas, chairman of Hindustan Lever, has indicated at the company's annual meeting in Bombay that the management is thinking of making a rights issue with a view to reducing the non-resident interest in the company from 65 per cent to 40 per cent under the provisions of FERA. The RBI had directed the company to complete dilution by the end of this year. Referring to the phosphates project at Haldia, the chairman has said that it is expected to go on stream during the third quarter of this year. This project will add Rs 20 crores per annum to the company's turnover and also help increase overall profitability.

He has also stated that the company's working during the first five months of the current year has been satisfactory and the management hopes that this trend will continue in the coming months.

Telco

Having achieved self-sufficiency in technology, Tata Engineering and Locomotive Company (Telco) does not envisage any difficulty in steadily improving its existing products, widening the range and expanding capacity to meet the growing needs of the country. The company has designed two new vehicles—a 15-tonne, 160 hp heavy vehicle and a 4-wheel drive vehicle. The former vehicle will not only permit a substantially greater payload but will also bring considerable savings in fuel consumption per ton-mile. The second has been designed for defence and civilian use in deserts, sandy tracts and rough, hilly country. Both these products are expected to have an assured market. The company expects to produce a wide range of vehicles as it keeps on increasing the installed capacity. It is going ahead with its programme of expansion of production to 56,000 vehicles per annum.

Telco's research section is paying special attention to the fuel economy. It is setting up capacity for the production of turbo-charges, which will be progressively fitted on the company's range of engines. While listing these favourable factors for the future growth of the company, Mr S. Moolgaokar, chairman, has also pointed out in his annual statement to some deterrents to the fuller utilisation of capacity. Among these he mentions the difficult availability of parts and components, inadequate supply of power, increasing industrial indiscipline and the deteriorating law and order situation.

Sandoz

Sandoz (India) has suffered a production loss of Rs 6 crores due to the 55-day strike early this year and its turnover for the first five months at Rs 13.90 crores has been lower by eight per cent compared to the corresponding period last year. Profit margins have also been reduced, according to the managing director, Dr J.N. Banerjee.

Disclosing this to the shareholders at the annual meeting in Bombay, Dr Banerjee has pointed out that the offtake of textile dyes has been affected due to the severe power-cut. The New Drugs (Price Control) Order is expected to adversely affect the pharmaceutical division, but demand for the pesticides has been growing.

J. K. Industries

Mr Hari Shankar Singhania, chairman of J.K. Industries Ltd, has told the sharelolders at the annual meeting in New Delhi that the company is expected to show improved working results for the current year. Sales during the last five months of 1979, have amounted to Rs 23.4 crores as against Rs 8.2 crores in the corresponding period of last year. The production is higher at 2.29 lakhs tyres as against 1.03 lakhs. Mr Singhania has stated that the company has achieved capacity utilisation of 77 per cent during the second year of its operation, i.e. 1978 against 48 per cent in 1977. The turnover has also increased to Rs 33.07 crores from Rs 15.78 crores in the previous year. The improved working has been mainly due to higher production and better consumer acceptance of the company's products.

The company has the unique distinction of introducing, for the first time in the country, steel belted passenger radial tyres, the latest in the tyre technology. Many other truck tyres with new tread parents incorporating the latest technology have been introduced. The company has also offered steel belted animal drawn vehicle tyres for the first time in the country to give a better product to the farmers in the rural areas.

Mr Singhania has pointed out that the position of major raw materials for the automobile tyre industry is extremely difficult one, both in terms of availability and the frequent and steep increases in prices. Added to these are extra burden caused by the movement of coal by truck, as rail wagons are not available, and also due to 25 per cent increase in power rates. These have necessitated an increase in the prices of tyres, which have in fact not been commensurate with cost increases. To recover the cost increase of a rupee the selling prices of tyres have to be increased by Rs 1.77. An amount of 77 paise has to be collected on behalf of the government towards the excise duty and sales tax against every one rupee increases in tyre prices.

Gold Mohur

Gold Mohur Mills recorded net sales for the 18-month period ended June 30, 1978, at Rs 18 crores as against Rs 8.63 crores for the preceding 12 months. There was a net loss of Rs 1.51 crores against Rs 74.25 lakhs. After certain adjustments, the accumulated loss stands at Rs 2.14 crores. This has been reduced to Rs 1.11 crores for transferring back the entire amount of Rs 1.03 crores lying in general reserve. The directors say that the working loss of the company has placed considerable strain on the resources. Even so the company continues to carry out its regular programme of renovating the mill machinery. The programme of modernisation and renovation of certain machinery under the soft loan scheme will require an investment of Rs 110 lakhs. The financial institutions have agreed to provide Rs 88 lakhs and the balance will have to be met from internal resources. Meanwhile, a decline in cotton prices has helped the company to show profitable results for the year ended June 30, 1979.

Bharat Gears

Bharat Gears Limited manufacturer of automobile gears, has reported excellent working results for the first nine months of the current year ending July 31, 1979. Presently, the plant is producing up to 120 per cent of its installed capacity, according to chairman, Mr Raunaq Singh. The turnover amounts to Rs 421 lakhs as against Rs 323 lakhs during the corresponding period of the previous year, showing an increase of 30 per cent. The company expects to achieve a sales turnover of Rs 540 lakhs for the current year as compared to Rs 476 lakhs. The management is taking steps to increase its present capacity from 1000 tonnes to 1500 tonnes per annum. A letter of intent for implementation of the enhanced capacity has already been received. The company has also planned a diversification programme, and is planning to set up modern facilities for the manufacture of gear box and axle assemblies.

Indian Card Clothing

The directors of Indian Card Clothing have proposed a dividend of 27 per cent for the year ended March 31, 1979, as against 24 per cent paid for the preceding year. Preliminary figures show a gross profit of Rs 2.81 crores as against Rs 2.60 crores in the previous year following sales of Rs 6.64 crores against Rs 5.99 crores.

After providing Rs 9.25 lakhs (Rs 9.05 lakhs) for depreciation, Rs 1.81 crores (Rs 1.67 crores) for taxation and Rs 0.40 lakhs (Rs 0.15 lakhs) for investment allowance reserve, the net profit is Rs 90.34 lakhs compared to Rs 84.69 lakhs for 1977-78. Out of this the proposed dividend will absorb Rs 59.60 lakhs (Rs 52.01 lakhs).

International Instruments

International Instruments is entering to the market on July 18 with a public issue of 700,000 equity shares of Rs 10 each at a premium of Rs 2 per share to raise a part of the finance required for its Rs 3.5 crores programme of expansion and diversification. The company is engaged in the manufacture of automobile dashboard instruments since 1958. It claims that more than 85 per cent of the vehicles, including two-wheelers plying in the country, are fitted with the company's products.

The company is setting up a new plant at Bommanasandra, a backward area of Karnataka, to implement the programme. Apart from expanding capacities of existing products, the company proposes to undertake the manufacture of ticket issuing instruments in technical collaboration with a UK firm. The plant is expected to commence production in January 1981.

According to Mr N. Krishnan, chairman and managing director, the company's turnover will reach a level of around Rs 14 crores by the end of 1981. The turnover during 1978 was Rs 6.87 crores and during 1977 it was Rs 5.77 crores. The company has paid a dividend of 12 per cent for 1978. It has been paying dividend regularly for the past 15 years. The new shareholders will be entitled to a dividend for the current year on a pro-rata basis.

Kamani Metals

Kamani Metals and Alloys' production during the first half of the current year has been 4,186 tonnes as against the target of 4,891 tonnes and sales, have been Rs 7.34 crores against Rs 7.61 crores. Giving this information to the shareholders at the annual meeting in Bombay, ths chairman Mr Ashish Kamani has stated that the company has on hand orders for 2,556 tonnes, valued at Rs 4.15 crores. He feels that with the availability of power and other inputs, the company should be able to do better in the second half of 1979.

Hindustan Ferodo

The turnover of Hindustan Ferodo in the current year so far has been slightly better at Rs **6.77** crores against Rs 6.47 crores of the same period last year, according to its chairman, Mr P.K. Mistry. Mr Mistry has told shareholders at the annual meeting in Bombay that the company's production has been slightly lower due to power shortage.

Camphor and Allied Products

Camphor and Allied Products' chairman, Mr Jayant Dalal, has told shareholders at the annual meeting in Bombay that the company's production and sales in the current year so far have been lower at 415 tonnes and Rs 2.14 crores, as against 470 tonnes and Rs 2.67 crores for the corresponding period of last year.

He has, however, expressed the hope that sales will pick up in the second half of the year as the inflow of imported camphor will go down. The company has approached the government for a suitable increase in the price of camphor in view of the sharp rise in the price of turpentine, the main raw material.

About the company's menthol project, Mr Dalal has stated that civil construction

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The Gwalior Rayon Silk Mfg. (Wvg.) Co. Ltd.
Regd. Office
Birlagram Nagda (M.P.)

NOTICE

NOTICE is hereby given that the Thirtysecond Annual General Meeting of the Shareholders of the Company will be held at GRASIM CLUB, Birlagram, Nagda, on Tuesday the 31st July, 1979 at 4.15 **P.M.** (S.T.) to transact the Ordinary and Special Business mentioned in the Notice dated the 1st July, 1979 accompanying the Annual Report and Accounts for the year ended 31st March, 1979, separately posted to the Shareholders of the Company individually at their Registered Addresses.

The explanatory statement as required under Section 173 of the Companies Act, 1956, is annexed to the Notice.

NOTE :

(a) A MEMBER ENTITLED TO ATTEND AND VOTE IS ENTITLED TO APPOINT A PROXY TO ATTEND AND VOTE INSTEAD OF HIMSELF AND THE PROXY NEED NOT BE A MEMBER.

(b) THE INSTRUMENT APPOINTING A PROX SHOULD, HOWEVER BE DEPOSITED AT THE REGISTERED OFFICE OF THE COMPANY NOT LESS THA FORTYEIGHT HOUR BEFORE THE COMMENCEMENT OF TH MEETING.

Shareholders are requeste to intimate to the Compan change in their registered a dresses, if any.

By Order of the Boa
B.N. PURANMALK
Secretary

6th July, 1979

work will commence in a month and the factory will be ready for production by the end of 1980

Metal Box

The directors of Metal Box India have declared an interim dividend of 18 per cent and have decided to keep the register of members closed from July 23 to August 8, both days inclusive, for purposes of payment of the interim dividend. The directors have also decided to change the close of the financial year from March 31 to September 30. The year ended March 31, 1979, has, therefore, been extended to September 30, 1979 and the accounts for 1978-79, will be for a period of 18 months. Barring unforeseen circumstances a final dividend will be considered for the extended period.

Bombay Paints

Sales of Bombay Paints and Allied Industries for the first five months of the current year have been about 10 per cent ahead of the same period last year, but the management is hesitant to predict the whole year's outcome. Dr R. R. Hattiangadi, chairman has observed at the annual meeting in Bombay that it is difficult to make a forecast of sales and profitability for the rest of the year. Much will depend on the availability of raw materials and packing materials and on the stability of their prices and, above all, on the supply of power.

Borax Morarji

Borax Morarji will offer its shareholders additional shares in the proportion of 4 : 5 at a price of Rs 104 per share by Dharamsi Morarji Chemical out of the 48,000 shares purchased by it from R.T.Z. Borax of the UK. Announcing this at the annual meeting in Bombay, chairman, Mr N. Dandeker has told shareholders of Borax Morarji that the company's working during the first two months of the current year has been satisfactory with sales ahead of those of the same period last year. With the shortage of raw materials, high cost of production and unfavourable market conditions, however, concerted efforts will have to be made to maintain favourable results.

Podar Mills

Dr Ramnath A. Podar, chairman, Podar Mills Ltd, has struck an optimistic note about the company's performance in the current year in his address to the shareholders at the annual meeting in Bombay. His optimism is based on the management's policy of diversification of the product mix. Currently, the company is selling 60-65 per cent of its production in processed form and the rest in grey. Its application for a soft loan is expected to be cleared in a couple of months. Nearly three-fourths of the modernisation programme will be completed by end 1981 and the rest in early 1982. On completion of this programme, the company's profitability will further improve.

Garware Nylons

The directors of Garware Nylons have recommended a dividend of 15 per cent for the year ended March 31, 1979, on the enlarged capital resulting from a one for-two bonus issue. According to preliminary figures, the company has earned a gross profit of Rs 5.04 crores against Rs 4.97 crores in the previous year following gross sales of Rs 34.20 crores against Rs 34.18 crores. After providing Rs 174.52 lakhs (Rs 143.57 lakhs) for depreciation, Rs 66.25 lakhs (Rs 44.65 lakhs) for investment allowance and Rs 115 lakhs (Rs 60 lakhs) for the tax liability, the net profit is considerably lower at Rs 148.16 lakhs compared to the previous year's Rs 248.66 lakhs. The proposed dividend will absorb Rs 97.20 lakhs.

Capital and Bonus Issues

The government has accorded consent to fresh capital issues by the following companies:

Bonus Issues

The Bharat Vijay Mills Limited : Rs 40 lakhs in equity shares of Rs 100 each in the ratio of 1 : 2.

Keshargulab Engg. Pvt Ltd : Rs 3 lakhs in equity shares of Rs 100 each in the ratio of 1 : 1.

Kirloskar Engg. Pvt Ltd : Rs 80,000 in equity shares of Rs 10 each in the ratio of 2 : 5

Troika Processes Pvt Ltd : Rs 199,000 in equity shares of Rs 199 each in the ratio of 3 : 4.

Further Issues

The Kohinoor Mills Ltd : Rs 36,60,000 in equity shares of Rs 100 each, for cash at par, to the nationalised banks/ public financial institutions.

Konkan Fisheries Pvt Ltd : Rs 5 lakhs in equity shares of Rs 100 each for cash at par, as right shares.

Babcock and Wilcox of India Limited : Rs 17 lakhs in equity shares on rights basis.

Usha Martin Black Ltd : 11 per cent right debentures of Rs 125 lakhs to the resident Indian shareholders.

The Tata-Finlay Ltd : Rs 2.50 crore rights debentures for cash at par to Indian shareholders.

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The Tata Engineering and Locomotive Company Limited

Statement of the Chairman, Mr. S. Moolgaokar, for the year 1978-79

The year 1978-79 was a good year for your Company. The Company's investments in Pune bore fruit and we were able to produce as many as 7,003 vehicles there. At Jamshedpur we produced 26,043 vehicles. Thus the total production for the year amounted to 33,046 vehicles, which is the highest attained so far. Sales increased by 33.3% and amounted to Rs 375 crores as against Rs 281 crores during the previous year.

TECHNOLOGICAL MATURITY

2. These quantitative changes in our operations have been accompanied by an important qualitative change. We have become self-sufficient in technology and we do not expect any difficulty in steadily improving our existing products, widening our range and expanding our capacity to meet the growing needs of our country. Two new vehicles have been wholly designed by the Company's Engineering Research Centre. These are the 15-tonne, 160 HP heavy vehicle and the 4-wheel drive vehicle. The heavy vehicle will not only permit a substantially greater pay-load but will also result in considerable savings in fuel consumption per ton-mile. This will enable the harassed and heavily taxed operator to achieve worthwhile operational economies. The 4-wheel drive vehicle has been designed for defence and civilian use in deserts, sandy tracts and rough, hilly country Both these products will have an assured market. Prototypes of additional new products designed and produced indigenously will be displayed at the International Trade Fair to be held in Delhi this November. All these products should provide a good indication of the progress the Company has achieved in developing our indigenous technology. As a consequence, a wide range of vehicles will be produced as we keep on increasing our installed capacity. Steps are already being taken to implement expansion of our production from the existing level to 56,000 vehicles per annum. Most of the critical machine tools required will be manufactured by our Machine Tool Division which has been producing high-precision and sophisticated machinery like transferlines at costs which are substantially lower than the prices of equivalent imported machinery. These in-built strengths will enable us to implement our forthcoming expansion more quickly and economically than other automobile manufacturers.

THE COMPONENT INDUSTRY

3. The lack, in some sectors, of a mature, balanced and well-developed Component Industry is now becoming a deterrent to the overall growth of the Automobile industry in general and to the fuller utilisation of your Company's existing capacity in particular. Vehicle manufacturers are dependent upon the services of a number of suppliers of parts and components and much depends on the efficiency of their collective efforts. There are only a few suppliers who are at the moment capable of supplying updated products produced to consistent quality standards. For various reasons suppliers suffer from constant interruptions in their production. This in turn affects the rhythm of production of the main vehicle manufacturers and increase their costs.

4. Your company continues to assist in every possible way the speedy development of a number of ancillary units. There are, however, certain sectors of the Component Industry where substantial additional capacity is urgently needed. These are thin-walled iron castings, heavy and complicated forgings made to tight tolerances, press tools, dies and percision tooling. Since such units are very capital and skill-intensive with a long gestation period, adequate capacity has not been established so far. Far more capacity in these areas is sorely needed to assist the growth of the Automobile Industry.

POWER

5. The rate of growth of vehicle production is also dependent on adequate supply of power. In my Statement last year I had stressed that the power shortage had grown into the single largest deterrent to investment and growth. Unfortunately, there has been no improvement whatsoever. In fact, the shortage has become far more widespread and has now reached crisis levels in regions where it will hurt most —W. Bengal, Bihar, Maharashtra etc.

6. The solution to the nation's power problems cannot lie in the mere sanctioning and leisurely installation of numerous generating stations all over the country. Thermal power stations which have necessarily to operate continuously for long periods require meticulous attention throughout the day. The operating teams must have the authority, freedom and incentive to run their sections efficiently so that a reasonable capacity utilisation can be achieved. Political interferenc in the management of Electricity Boards has frequently resulted in the selection of incompetent people to man thes vital installations.

7. Adequate supply of consistent quality coal been a problem that has existed for many years. Yet nothing has been done to install washeries at the pit-heads of non-coking coa mines. If this were done, the operating efficiencies of the thermal stations could be improved substantially as they would be fed with coal of a consistent quality.

LABOUR UNREST

8. The alarming increase in industrial indiscipline and the deteriorating law and order situation also cry out for immediate attention. No amoun of effort to enchance industria production by installing additional capacity and improving the infrastructure can yield significant benefit unless Labour-Management relations are restored to an even keel. The nation-wide spate of strikes and lock-outs and the associated violence are of benefit to no one. The individual earnings o employees are lost, the productivity—and by productivity mean the indispensable conditions of progress—the financial health and incentives fo growth of companies are undermined and the Nation is deprived of progress and much needed revenues. This game no one wins, but it has been played for too long.

9. If industrial disharmony i allowed to continue, the long-term effects on productivity discipline and the nationa character itself will be too damaging for repair. For ove two years now we have been hearing about the Industria Relations Bill and of a National Labour Policy but a decision acceptable to all concerned. le alone its implementation, ha eluded us.

INFLATION

10. Unfortunately, after thre years of price stability, inflatio is once again endangering progress. In the last four months

here have been substantial and apidly escalating cost increase n the automobile industry. Vhilst the only effective remedy n the long run is to accelerate he rate of investment and proluctive employment, I would irge Government to concentate its attention in the imnediate future on providing he basic conditions required to ncrease production which are mainly stable industrial relaions and adequate power supplies throughout the country.

NDIRECT TAXATION AND THE ROAD TRANSPORT INDUSTRY

11. The oppressive burden of the wide range of indirect taxes is such that the operations of Telco vehicles alone generate almost 10% of all the tax revenues collected from all sources by the Centre and the State Governments. These taxes increase the cost of road transportation by as much as 50%. The burden permeates through all levels of society and affects the price of every product. In its report on indirect Taxation, the Jha Committee noted that "The high cost of road transport has an adverse impact on the cost/price structure of the basic needs of the community. It also has a particularly unfavourable effects on those parts of the country which are really backward and in which no railway facilities are available or can be made available in the foreseeable future."

The report adds "The in direct taxation of road transport has a perceptible impact even on the lowest expenditure groups as it raises the cost of every necessity."

12. Pleas from all quarters, including committees appointed by Government itself, that the burden of indirect taxation on the manufacture and operation of commercial vehicles be reduced, have been made for several years now. But they have been of no avail. Some anomalies are incomprehensible; commercial-vehicles meant for mass transport seem to be taxed more than cars ane scooters meant of personal transport. For example, if the same concession given to the manufacturers of cars and scooters is given to the manufacturers of commercial vehicles, viz. exemption from excise duty on the purchase of tyres and batteries, the prices of our vehicles would come down by as much as Rs. 5,000

PROBLEMS OF THE TRANSPORT OPERATORS

13. Transport operators represent a growing class of new entrepreneurs. Since an increasing share of the future growth of traffic will inevitably move by road, they will be called upon to perform an increasingly useful function in our society. And yet they face problems of inadequate and unsafe roads and innumerable man-made impediments. The hardworking owner-operators must be the most harassed of individuals. On the move almost all the time, they work under conditions which are extremely hazardous and arduous. Owing to the loss of valuable time at a multitude of check-posts and the oppressive burden of taxes, it becomes imperative for the operator to overload the truck beyond permissible limits. For, otherwise, he can neither meet his repayment and tax liabilities nor look after the basic welfare of his family. The widespread practice of overloading and the need to minimise undue delays explain the element of gratification which is prevalent in the road transport sector.

14. Government's response to repeated pleas for increased ploughback of the tax revenues generated by the road transport industry into the maintenance, improvement and construction of roads continues to be grossly inadequate. There is considerable scope for stepping up the outlay, and Government should seriously consider re-investing in road transport a larger proportion of the tax revenues generated by this sector. Road building in the rural areas creates employment for the poorest of the poor. No other investment generates as much employment as the building of roads. And yet only a third of the tax revenues generated by road transport is spent each year on highways, roads and bridges.

15. As road traffic increases, road casualties are also increasing. Therefore, it is worth bringing to the notice of Government that existing regulations in matters affecting road safety are not effectively enforced. Standards for regular vehicle inspection are not adhered to. Even driving licences are granted to those who do not possess the requisite skills. Illegal gratification again has a hand in all these matters.

16. Commercial vehicles have also to be updated and built to meet increasing safety standards. Apart from what has already been done, Telco's efforts will be increasingly directed towards providing vehicles so equipped as to make long distance driving far more comfortable and safe. The new heavy vehicle, for instance will be supplied with dual-circuit braking systems, power steering anti-roll bars, synchromesh gears and a cab which has been designed to international standards of visibility, comfort, noise level and ventilation.

FUEL ECONOMY

17. Fuel economy is a major area of concern today in the Automobile Industry because of the inevitable increase in fuel prices. Your Company's Research section is paying considerable attention to this area. We are setting up capacity for the production of turbochargers which will be progressively fitted on our range of engines. Turbochargers have now developed to such an extent that they constitute the most cost-effective means of not only producing increased horsepower, but of securing much better fuel economy. They also contribute substantially to reducing the smoke and noise.

EXPORTS

18. In the automobile field your Company maintains a commanding position as the largest exporter. During the year our exports amounted to as much as Rs 38 crores and we are confident of steadly improving upon this performance. Our joint venture for the assembly of vehicles in Malaysia is operating successfully and we now enjoy a fair share of the Malaysian market in the face of competition from established international companies. More such projects are being planned.

PUBLIC SERVICE

19. Telco has grown in service to the nation. It grew essentially because it was built to provide what the people wanted, namely, good products with the lowest life cycle costs. Today the Company employs over 30,000 people and produces the largest number of commercial vehicles—up-till now it has produced well over 4,00,000 vehicles. It has brought into existence over 1,00,000 entrepreneurs owning 1 to 3 Telco trucks who, as I have already stated, generate enormous revenues for the Exchequer every year. Every vehicle that Telco sells creates jobs for about 12 people. Thus, 3 to 4 lakhs of new jobs are created year after year. If I may be permitted to say so, Telco has served the public well and the public has a high regard for your Company.

20. Such an asset has a right to the nation's savings for meeting future investment and working capital needs and it is indeed most gratifying that such resources have always been readily available to your Company.

CONCLUSION

21. The work of our staff has grown on account of our increased activities and has become far more complicated due to the prevailing national state of industrial unrest and the power famine, it would be only too easy to take for granted the efficiency with which our smooth-running machine has handled this increase but that would be wrong. It is the skill, the interest and the enthusiasm of our employees which have kept us in the forefront of our industry and, on behalf of the shareholders and the Directors, I would like to express to all our employees our sincere thanks for an excellent year's work.

Note : This does not purport to be a record of the proceedings of the Annual General Meeting.

SOUTH INDIA VISCOSE LIMITED

Coimbatore-18.

Statement of the Chairman, Shri S. N. DESAI

at the 21st Annual General Meeting
held on Wednesday, the 27th June 1979,
at the Registered Office of the Company,
'Shanmuga Manram', Race Course, Coimbatore-641 018.

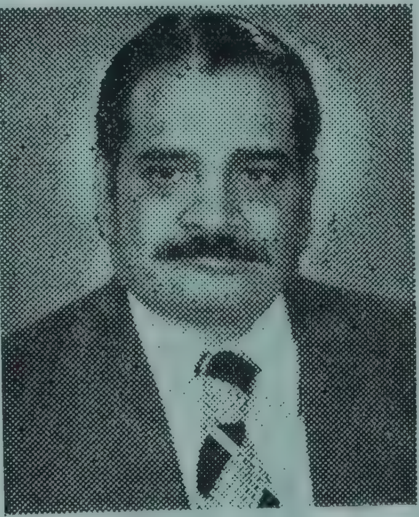
Ladies and Gentlemen,

I have great pleasure in welcoming you to the 21st Annual General Meeting of our Company.

Before I deal with other issues, let me inform you that after the Annual accounts and the notice of the Annual General meeting was posted, some of your Directors have resigned as Directors of the Company. Sri G. K. Devarajulu, one of the promoters of the Company, resigned his Directorship and Managing Directorship, it appears, arising out of a notice from a Shareholder to remove him. Some of the other Directors, Sri K Sundaram, Sri K Rajagopal, Sri VN Ramachandran, Sri R Krishnaswamy, Sri V Ramaswamy Naidu and Sri D Lakshminarayanasamy also resigned as Directors. Some of your Directors requested Sri G K Devarajulu and others not to take such an action as prima facie there was nothing which would provoke a resolution which would lead to resignation from the Company. It is regrettable that Sri G K Devarajulu, one of the promoters, who has guided the affairs of the Company for so many years, has resigned followed by others giving an impression that it was a group resignation. I, on my part, would have appreciated if they had resigned on a particular principle of corporate management.

Sri D C Kothari, one of the Directors who has been associated with the Company from inception has also resigned as he has not been able to attend the meetings of the Board for some reason or other.

I am reporting this to you with a deep sense of regret and sorrow that such a thing should happen in one of the premier corporate body in South India. I, as the Chairman, would not have referred to these notices and resignations which appears to have nothing to do with the working of the Company but something which is beyond the affairs of your Company.



Shri S.N. Desai

Your Company is progressing and is bound to progress further irrespective of the type of problems that might be created. I do sincerely hope that in the interest of industry, labour and large number of shareholders the issues, which do not concern this Company are not brought up whereby the interests of all concerned suffers and the beneficiary is somebody else, other than the rightful people.

It is with great pain that I had to make this observation. I will now dwell on the other aspects.

You are all aware that the Country is facing considerable difficulties in respect of shortage of raw materials, essential commodities etc. and labour unrest not only in industry but also in other sectors where normally one would not have visualised that the country would have to face such unrest. No doubt, the present Government is doing its best to tackle the situation as it crops up. What is needed is an insight and foresight which will allow the industries to grow in a smooth manner and also contain inflation, which is rapidly rising without following the traditional path of politicalising every issue. The present Government is making every effort to do its best for the people on the long term basis but the need today is to ensure that what is existing progresses, and contributes to a great extent of the welfare of the people through the more and more industrialisation. Because of the internal strifes in some countries, the short supply of raw materials has affected our industries to a considerable extent. To give an illustration your Company require sulphur as the raw material and since this was affected because of short supply, not only the normal production got reduced but the Company had to pay exorbitant price in the open market resulting in practically reducing the surplus available to you. The position has temporarily improved. In addition to this factor, the imposition of power cut in our State also contributed to the curtailment of normal production, further aggravated by short supply of diesel oil. It so happens that at present it is not your Company alone that is suffering from various maladies which do not go to contribute for further growth, but the whole industrial sector is suffering from one scarcity or other, on the high prices and also for the movement of finished goods. It is, therefore, necessary that an appropriate policy aimed at increasing the gross national product is evolved at the earliest and put in action.

Coming to the affairs of the Company, I am glad to tel you that the synchronising o the old pulp plant with th new unit was over in July 1978. It is regrettable tha due to heavy rain and floods which revaged the Nilgiris Dis trict, the movement of woo from the mountains had to b stopped and the pulp plant wa forced to be closed for some time. We have been requestin the State Government to cons der this company on some pr ority basis and allot sufficien quantity of required raw mat rial—Pulp Wood. Unless th encouragement from the Sta Government is there, it woul be very difficult for any company to carry on its business. I am quite sure that the State Government would definitely take a sympathetic attitude and lend a helping hand to your company. The company has made adequate representations before the Government of Tamil Nadu, which are pending and it is my earnest hope that a reasonable and fair judgement would be forthcoming in the interest of the company and public.

The Company has made further strides in setting up of the 20 ton Polynosic Staple Fibre Project. I am glad to inform all of you that the Government has given the import licence for the import of sophisticated equipment from abroad. Most of the equipments required for the Polynosic Staple Fibre plant would be procured indigenously. Our Collaborators are studying the feasibility of producing Polynosic at the very earliest possible time, utilising the existing capacities.

You are all aware that pulp wood is the basic raw material for our company. With a view to encourage the farmers to cultivate the bluegum and wattle wood, a seminar on afforestation scheme was conducted and I am glad to inform you that the seminar was a success and many farmers evinced keen interest in developing the forest resources. In the course of time, I am sure the afforestation scheme would indeed to go a long way in solving the raw material problem with the active cooperation of the State Government.

I am glad to inform you that the approval from the Government has been received by the Company for undertaking Rural Developments recently. Your Directors would study and undertake a plan for Rural Development at the earliest whereby your Company will discharge its social responsibilities.

Further to the Rural Development, as you would have observed in the Directors' Report, steps are being taken to contain pollution in the interest of society as part of its social responsibility though your Company is not required under any statute.

Before I conclude I hope that the industrial scene which looks cloudy at present would clear soon and a bright outlook would emerge shortly following economic and other policies, by the Government.

In conclusion I would like to place on record my sincere thanks to our Collaborators, M/s. Italviscosa Eastern Trading S. p. A., Milano. Italy, for their guidance, help and co-operation extended to your company, which has been a source of inspiration to the company all along.

I would also like to thank the Government of Tamil Nadu, Government of India and Banks and also the employees of the company for their devoted service and finally to you, our Shareholders, for the confidence you have reposed in us which has been a source of strength and encouragement for the future and for the time you have been able to spare to be present here to-day.

Thank you,

Note : *This does not purport to be a record of the proceedings of the Annual General Meeting.*

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Dagli committee report

The Vadilal Dagli Committee on Controls and Subsidies, which submitted its report to the deputy prime minister (Finance) on May 15, has reached the conclusion that both controls and subsidies have helped promote a number of policy objectives. In the context of present unequal distribution of wealth and income, together with imperfections in market systems in India, they are not unnecessary.

The committee, however, has pointed out that many war-time controls, introduced to meet an emergency situation were gradually absorbed into a system devised to meet the needs of long-term planning. There has been a multiplicity of controls to meet various objectives and there are instances where controls have remained long after the need for them had been over. The control system today has become so complex that even the executive authority responsible for implementing them is unaware of the exact control system which they have to implement. It has, therefore, called for a good deal of rationalisation of both controls and subsidies.

The major recommendations of the committee are summarised below :

CONTROLS, THE committee has suggested, should have the following objectives :

(a) that scarce national resources get directed to priority sectors as per national Plan and public policy;

(b) that the basic consumption needs of the people are met, in particular, the needs of the weaker section of the society, are provided at prices within their reach;

(c) that disparities in income and wealth are reduced and undesirable concentration of power prevented;

(d) that employment and income for large masses of people are protected by promoting growth of the decentralised sector; and

(e) that self-reliance is pursued by promoting technological capability, import substitution and exports in tune with the resources endowment of the country.

The committee has recommended that controls and regulotions should have a limited period of validity and these should be reviewed periodically, say once every five years. The control system should be simple and the points of control should be as few as possible.

The controls designed to meet temporary imbalances of one kind or the other should have a validity period of only three years at the most, at the end of which they should automatically lapse unless specifically extended. Each control should be designed to assist or to protect, or to restrain or to discourage clearly defined target groups or specified areas of activity. All controls should be as non-discretionary as possible and should leave the minimum of discretion to the authorities administsering them.

Price controls by themselves are of no value unless accompanied by an effective distribution system and control of government over an adequate share of the supply of the controlled item for public distribution. In fixing controls over prices and distribution, prior consideration should be given to their implementability and the effectiveness of the control machinery.

The controlled price should not be such as to discourage the production of the controlled item. In any case, control over prices should be limited to articles which go into the consumption basket of the common man, or to intermediate goods which are either basic or the necessary for the manufacture of consumption goods required by the common man, or are essential inputs for the decentralised sector affecting large employment.

In the matter of agricultural prices, the focus of attention should be on relative prices of competing crops so that the optimum use of land may result from the announcement of support prices. An adequate buffer stock should be built up to help in the management of supply of all items the output or supply of which is subject to large fluctuations.

Industrial Licensing

In regard to industrial licensing, the committee has found that types of integration between industrial licensing and overall planning which had been achieved during the third Plan has not been followed lately and guidelines for industries issued by the ministry of Industry do not have the same organic link between Plan and licensing policy. In consequence, the industrial licensing system has not ensured development of industries according to Plan priorities, has failed to prevent growth of capacity in non-essential industries, has not been effective in securing proper regional dispersal of industries, and has not succeeded in containing monopolies and concentration of plant power.

Periodic Revision

The committee has, therefore, recommended that a list of totally banned industries should be announced from time to time. Among other industries, some should be reserved only for the village and cottage sector and some others opened for small-scale industries with an investment limited at Rs 10 lakhs. There should be an open list of industries for which no licence should be required. Creation of capacity in these industries should be freely permitted, subject to clearance under the MRTP Act and FERA, where relevant.

Residual industries should be subject to licensing for all madium and large-scale industries. The present exemption of Rs 3 crores would continue for this category except for MRTP and FFRA companies. Where there are exemptions from licensing, registration of new capacity should be made a truly statistical matter, the registration being the responsibility of the district industries centres, a copy of the information being merely endorsed to the DGTD for statistical purposes. The final power to approve or veto any proposal for industrial approval should vest with one single authority.

Penalties should be considered for both underutilisation of capacity as well as pre-emption of capacity without implementation of the capacity. The list of industries reserved for the public sector should continue.

Reliance in regard to capital goods imports should be placed on the tariff mechanism rather than detailed scrutiny of the type now envisaged for 14 key industries. Scrutiny by the DGTD should be limited to the "indigenous availability" angle and not to the "essentiality" angle which is no longer relevant.

Import of Technology

In the import of technology to be permitted, care should be taken to avoid capital-intensive technology which may reduce employment, or technology in regard to products which may not be relevant from the point of view of planning goals. With this selectivity of the type of technology, updating of technology and its adaptation to Indian conditions should be encouraged.

Insofar as capital issues control is concerned, there should be further simplification of this system by the issue of guidelines in respect of bonus issues. Having done that, the office of the Controller of Capital Issues should be abolished as capital issues control has outlived its utility. Control in regard to capital issues, insofar as FERA companies are concerned, should be exercised by the department of Economic Affairs and in regard to the residual matters by the department of Company Affairs.

Mining

In the field of mining, the committee has recommended that no area should be kept reserved for exploitation by the public sector for more than five years and any such area so reserved should be explored and exploitation commenced within a period of five years, failing which the area should be dereserved. The list of minerals in the First Schedule should be updated once every five years.

There should be no need for taking out 'certificates of approval' before a party can apply for a prospecting or a mining lease and this requirement should be done away with.

Some minor definitional changes are called for in the MMRD Act: for instance, the definition of "foreigners" which should be made consistent with FERA, and the extension of the coverage of the MMRD Act to minerals in the ocean-bed of the continential shelf around India.

The time permitted today for taking a decision on lease applications by state governments—stipulated at 12 months —is too long and should be reduced to 180 days. There should be a stipulation in regard to the time taken by the centre for taking decisions in respect of the minerals listed in the First Schedule, which should be limited to 90 days. In case of failure of either the centre or the state government to take a decision on the case within the stipulated period, there should be a tribunal to finally pass orders on the case within 180 days.

For non-scheduled minerals, the procedure of "deemed rejection" and of revision petitions may be dispensed with and the state governments may be authorised to take a final decision. There should be legal provision for applicants for mining leases for non-scheduled minerals to seek recourse to the courts of law if no orders are passed within 12 months from the date of application.

Lease Cancellation

The circumstances for cancellation of leases before termination should be defined more sharply, and apart from cancellation for major violations of lease conditions, cancellations should not normally be resorted to, and even where necessary, lease-holders should be given some time to adjust so that loss of capital can be avoided or at least minimised.

The requirements of production of income-tax clearance certificate for grant of prospecting or mining lease should be done away with the procedure of submission of an affidavit by the applicant—as accepted for import trade control—should be adopted for the issue of mining leases. The minimum period for which leases should be granted should be laid down by central notification under the MMRD Act, for different minerals.

Strict rules ought to be laid down in regard to the ravaging of environment and there should be a system of periodic inspection to ensure that no undue damage is done, the lessee being required to restore the environment at the end of surface mining operations.

While changes in royalty rates should continue to be determined by the centre in the large national interest, periodic review should be provided so that the states get their due share of the income arising from the exploitation of minerals.

Essential Commodities

In regard to essential commodities, the committee has observed that the Indian economy is subject to temporary imbalances between supply and demand of both essential consumer goods and key industrial raw materials. So the Essential Commodities Act is a necessary piece of legislation for commodity regulation. However, its indiscriminate use has made the system unavoidably complex and difficult to understand. The committee, therefore, has recommended that the Essential Commodities Act should remain on the statue book and orders issued under it should have a limited life of not more than three years, which should automatically lapse after the stipulated period. Even the statute should be reviewed every five years.

Before an item is declared as essential, there should be proper homework to consider whether it is necessary to regulate the production, supply and distribution of the item concerned through the Essential Commodities Act, the feasibility of implementing the proposed control order, and the machinery for implementation of the control.

The list of items that have been declared as essential as of now should be drastically pruned. Only such commodiies as meet one or more of the ollowing criteria should be egulated through the Essential Commodities Act:

(a) that it is a mass consumpion item which people cannot do without; or that it is an important raw material or component going into the production of such a mass consumption item; or

(b) that it is a universal intermediate which goes into the production of a wide range of products.

All controls under the Essential Commodities Act, which are concerned essentially with the management of demand for scarce items, should be accompanied by simultaneous measures to augment supplies. Items declared as essential should be clearly identifiable and not covered under broad generic heads or commodity groups so as to avoid giving the executive authority sweeping powers in regard to all items included under the generic category.

There should be adequate consultation and coordination not only to ensure reasonable management of the available supplies but also for consultation between the centre and all concerned state governments.

Import and Export

The committee has recommended that import and export policy should have a validity of three years to permit available adjustments in production structure. Swings in policy arising from pressures should be avoided by making the formulation and planning of policy a matter of study and evaluation by an Import/Export Policy Board, which should be set up in the ministry of Commerce. The board should keep under review the lists of open, banned and restricted items and the list should identify each item specifically and not by generic name or category.

While short term policy adjustments are not ruled out according to changing circumstances as may be necessary, too many and too frequent changes in policy should be avoided between two policy periods.

Export plans should be drawn up in consonance with and dovetailed into overall production plans.

The actual user condition on imports under the OGL should be removed.

The list of items canalised for export and import through public sector canalising agencies should be carefully reviewed, criteria for canalisation laid down, and items not suitable for bulk imports decanalised. For certain items, canalisation facilities should be extended to state government agencies, so that they can meet the needs of small-scale units by bulking their import requirements.

All cash assistance rates should be limited to a refund of the indirect tax element in the process or production of an export item. The interest subsidy on export packing credit is justified and should continue.

To the extent possible, the scheme for advance licensing of imports of raw materials and components for export production should be extended to more items. The delay in disbursement of duty drawback should be reduced and a way should be found to avoid the cost to the exporter of delays in the bank remittances. No substantive part of import policy should be formulated in the GLI.

Where export inspection involves the charging of a fee by export inspection agencies, these agencies should be made to bear any liability arising out of disputes as to quality.

Import policy should be modified from time to time to make it responsive to the needs of the economic and procedure should be revised to minimise difficulties and to reduce delays. Protection to the domestic industry should be afforded through the tariff mechanism.

Tax subsidy for market development should be given only to specified products and should be restricted to three years at the maximum.

Exchange Control

As regards exchange control, the committee feels that the present policy of managing exchanges by having a realistic exchange rate should continue as a guarantee of realisation not only of export receipts but also of remittances by Indians abroad.

The procedure for ensuring that export receipts are realised should be simplified, the Reserve Bank's responsibility being primarily directed to verification of GR originals with GR duplicates. The task of verification of GR triplicates with GR duplicates should be undertaken by the nationalised banks who are in any case responsible for realising the export proceeds on behalf of the exporters, the responsibility of the Reserve Bank being limited to sample checking.

The rules regarding foreign travel should be simplified and rationalised: so also the rules regarding import of baggage by Indians returning from abroad as well as for tourists wishing to take away Indian goods at Indian prices.

While control over capital transactions must continue the repatriation of non-residents' assets arising from dilution of foreign capital—under the Foreign Exchange Regulation Act—may be liberalised. At the same time, the functioning of Indian joint ventures abroad should be looked into and the need and justification thereof in future re-examined in the light of data pertaining to the net gain therefrom to the economy. These data should also be presented to parliament on an annual basis.

The focus of the exchange control system should change and instead of undue harassment of small people with small transactions, attention should be devoted to checking transactions of companies with links abroad, particularly inward remittances of profits and dividends from the substantial investments made abroad by Indian firms.

Rent Control

The committee does not favour rent control in respect of commercial and office premises. Buildings occupied by corporate organisations, it has suggested, should be free from rent control. For all other buildings, increases in rents of old buildings should be allowed periodically, by gradual steps, over a period of, say, 5 to 10 years, to bring the rental to a rational level. In addition to this, the existing tenants should be allowed to buy up houses occupied by them at multiples of the capitalised value of the existing rent. Rent control should not be maintained in respect of houses occupied by tenants who own house property in the same town which they may have let out at high rental.

Subsidies have a tendency to snowball and to become sticky, and therefore begin to generate inefficiency. Three subsidies given by the centre—food, fertilisers and exports—account for 70 per cent of the total budgetary subsidies.

In the interest of proper town planning, the Urban Land (Ceiling and Regulation) Act should be modified and extended to permit acquisition of all properties in entire blocks where most houses deserve to be pulled down so that entire areas can be re-developed into housing colonies for the less effluent. Prior to doing so, the concerned authorities, however, should give a minimum notice of 5 to 10 years so that no new construction is started in the designated area.

To achieve the social purpose, a penal tax may also be levied on urban property in excess of the ceiling which may compel people to gradually change their life style.

Subsidies

The committee has found that central government subsidies have grown to a sizeable figure during the 1970s and currently amount to about Rs 2,000 crores per annum. This figure includes the loss of central government undertakings arising from pricing policies adopted by the government. Besides the losses of undertakings and services operated by state govesnments are around Rs 1.000 crores a year. Subsidies have a tendency to snowball and to become sticky. They, therefore, begin to generate inefficiency and complescency.

Three subsidies given by the centre account for 70 per cent of the total budgetary subsidies—Rs 1,343 crores out of Rs 1,712 crores. These are on food, fertilisers and exports.

The committee has recommended that the costs and recipients of benefits of all subsidies should be reviewed periodically, say, once every three years. Subsidies should in general be given only to sustain tiny unit decentralised production or to support the consumption of the weaker sections of the population.

Where necessary, clear-cut overt subsidies should be given in lieu of indirect subsidies, e.g. losses of public sector undertakings arising out of a deliberate policy decision of government to keep prices below the cost of production in the interest of keeping down the general price level.

The existing subsidies from the central government budget should be restructured in terms of the above criteria.

The subsidy on foodgrains, which arises partly for buffer stock maintenance and partly owing to distribution costs, should be broken up into these two elements, the cost of buffer stock maintenance being justified as a subsidy, the cost of distribution being fit for only subsidy to the extent that the beneficiaries comprise the people below the poverty-line.

Fertiliser subsidies should be phased out in three years and a new subsidy given for promotion of organic fertilisers. Increased subsidy for the use of fertilisers should be given to smaller and weaker farmers under various promotional programmes within the ambit of the integrated rural development scheme.

Export subsidies should be restructured and granted to meet only the cumulative burden of indirect taxes in the cost of production.

In the textile sector, there is justification only for subsidy on the production in the decentralised sector namely, handloom and khadi, and in the interim period, on the production of controlled cloth in the mill sector but with necessary arrangements for distribution of the controlled cloth to the vulnerable sections of the population.

The interest subsidy should also be restructured, and losses of public sector undertakings arising from unrealistic pricing of products should be subsidised directly in full so that the nature and extent of the subsidy is known and realised, and attention is focussed on such subsidies which are granted in order to keep down the price of a product below its cost of production or because the concerned undertaking is sick.

Entries designated as subsidies in the budget, which do not merit being treated as such —as for instance, the so called subsidy to the Bharat Gold Mines Ltd—should be removed from the list of subsidies by changing the accounting procedure.

There is a case for increased transport subsidy in favour of hilly and far-flung regions, so as to make all essential commodities available to people in those areas at reasonable prices. The backward area subsidy should be on a sliding scale and increased in respect of really backward areas, but given on the criterion of employment generated instead of capital invested. There should be an increased budgetary allocation as subsidy in favour of areas hit by natural calamities to compensate the population for the capital loss. For this purpose, an allocation of one per cent of central and state government budgetary outlays should be made on a regular basis.

There is a case for increasing the subsidy for housing intended for the low-income people. The subsidy to vulnerable sections of the population through schemes like the integrated rural development should be increased.

Foodgrains

As regards food policy, the committee has recommended that the focus of attention should continue to be on reasonable support prices—in line with reasonable parities, *Inter-se*, as between different crops—and on buffer stock operations. The cost of buffer stock maintenance should be a legitimate charge on revenues for achieving food security. The subsidy required to meet the cost of distribution should not, however, be a charge on revenues except to the extent required to meet the consumption needs of people near or below the poverty-line. The subsidisation of food should, therefore, be limited either to the items consumed by the target group—e.g. millets—or by issue of special ration cards to people below a certain level. The latter should be systematically attempted so that subsidies reach only the deserving sections of the population.

Private distribution channels should be harnessed for the public distribution system, with a proper code of conduct laid down for the private traders and adequate monitoring not only by government but by consumer committees, so that these shops function in the public interest. The cost of public distribution should be reduced not only by the above means but also by increasing the turnover from the retail shops.

Input subsidies for agriculture—e.g. irrigation water, power, fertilisers and seeds—should also be subsidised only for the smaller and weaker farmers, through larger subsidies under the integrated rural development scheme. Subsidies would also be justified for the construction of godowns and storage facilities in far-flung, inaccessible and hilly areas which frequently remain cut off from the rest of the country over part of the year.

Insofar as control over roller flour mills is concerned, the expansion of capacity should be allowed to achieve better regional balance in flour milling capacity, but roller flour mills should be required to continue to obtain their wheat supplies from the FCI so that the buffer stocks can be rolled over, and the mills also do not create sudden large demands in certain markets.

Insofar as rice milling is concerned, there should be controlled, selective increase in rice milling capacity and modernisation of old hullers of mills with rubber rolls, so that the requirements of the public distribution system can be met cheaply, and at the same time, the hand-pounding of rice can be encouraged so as to provide employment.

In line with the reduction in licensing and other restritions, there should be a reduction in the number of licences to be taken out, and the number of registers to be maintained by the fair price shops, so as to reduce harassment and make the distribution system more efficient.

Edible Oils

As regards edible oils, the committee has suggested that in view of the gap between demand and supply, which is likely to continue, cheaper edible oils should continue to be imported. Apart from providing an input for the vanaspati industry, they should also be made available for direct consumption by the masses of people, through fair-price shops. The control over the input-mix of the vanaspati industry should continue, so that indigenous groundnut oil is available for direct consumption as an edible oil. The STC should be asked to go in for long-term supply contracts and arrange for the requisite quantities of vegetable oil import. Adequate storage capacity for oils should be built around the country, particularly in deficit areas, with a view to both buffer-stocking of oils and to preventing sharp increases in prices during the off-season.

Realistic support prices for edible oils should also be announced to encourage the increased cultivation of edible oilseeds. The import of cheaper oil should not be allowed to depress the internal market. For this purpose, both the canalisation of import of vegetable oils and the fiscal system by way of import duty adjustments should be used to ensure that prices of edible oilseeds and oils do not get out of hand.

Among the other controls on the edible oils and vanaspati sector, there is need for continuance of the storage control order in the background of the general deficit in oil supply and of the ban on forward trading, with selective relaxation of the time allowed for NTSD contracts. The Solvent Extracted Oil, De-oiled Meal and Edible Flour (Control) Order does not appear to have any relevance today and should be withdrawn. There is a case for selective relaxation of control over the increasing of capacity in the vanaspati industry, the relatively uneconomic units being permitted to expand to economic size.

In order to introduce some stability in the availability and price of edible oils, a buffer stock of at least two months requirements should be build up through additional imports if necessary. The stipulation of use of a minimum of five per cent sesamum oil in vanaspati manufactures should continue.

Sugar

In respect of the sugar industry, the committee has recommended that in areas where it is possible to continue existing factories through better cropping methods and the sugar industry can be made viable on a long-term basis, the existing sugar factories should be converted into cooperatives of cane-growers with universal membership so as to establish a nexus between the cane price and the sugar price without the need for government intervention.

Such a policy, the committee feels, is desirable to avoid both a continuing subsidy on sugarcane as well as a continuing subsidy on sugar production which is implicit in the takeover of uneconomic sugar factories.

Where the sugar industry is not likely to be viable, there should be a phased programme for converting sugar units into other industrial units, e.g. cotton yarn spinning mills for supply of yarn to handlooms, even if based on cotton obtained from other states and other agro-based industries.

For this purpose, a subsidy should be given for conversion of the units from sugar production to other activities.

If this policy is adopted, there would be a case for government subsidy for maintaining a buffer stock of sugar which may prevent swings in prices. An essential ingredient of the policy is uniform pricing of sugarcane (based on recovery of sugar) throughout India to bring about an optimal utilisation of the land resources of the country.

Some of the controls on sugar and related items are no longer relevant and may be rescinded. In particular, there is no advantage in retaining the Sugarcane Pressmud Control Order and the Gur (Regulation of Use) Order.

Textiles

The Cotton Corporation of India, the committee has suggested, should be freed from bureaucratic control, given necessary funds and general guidelines and authorised to buy up to 30 per cent of the cotton crop and also build up a buffer stock of cotton for which it should be given the requisite credit facilities. The corporation should be divested of its bureaucratic character, its shares being held jointly by the central government, cotton marketing cooperative federations of the cotton-growing states, cooperatives of cotton farmers. etc.

Cotton ginning and pressing should be reserved for cooperatives of cotton-growers with universal or near-universal membership.

In order to raise the output of cotton, the spraying of the cotton crop with pesticides should be a national programme, the cost being met from the cotton cess fund. The cess on cotton should be raised from the present 25 paise per bale to 50 paise per bale, or about 1½ per cent of the price per bale, in order to pay for the spraying operations as well as for the carrying charges of a part of the buffer-stock of cotton to be built up.

There should be no canalisation of and no subsidy on imported cotton in future.

The control over the weaving capacity of the mill sector should continue. The soft loan scheme of the IDBI should not be used for the expansion of weaving capacity/reduction of employment in the weaving section of the industry, and for financing the modernisation/replacement of well-to-do mills at interest rates not available to the decentralised sector.

A large number of controls at present on the statute books in respect of textile industry are redundant and should be removed.

Price stamping of mill cloth is redundant and should be withdrawn, except for Janata cloth which is subsidised. The reservation of spheres of production by handlooms should be enlarged and control enforced. For this purpose, there should be regulation of the sale of looms by the textile machinery manufacturing industry. Some varieties of cloth production should be reserved for the powerloom sector, though the expansion of this sector should not be allowed.

Excise duty on yarn in cones should be raised *vis-a-vis* yarn in hanks. The area of reservation of products for the handloom sector should be enlarged to include sarees and dhotis with border. Control over production of yarn in hanks should be made more stringent in regard to proportion and quality.

Disbursement of subsidy on handloom (on production of Janata dhotis and sarees) should be speeded up and the procedure and documentation simplified drastically. The supply of good quality yarn at reasonable prices for the decentralised sector should be ensured, and until sufficient capacity for yarn production, by spinning mills set up by government or by the cooperative sector, is created, there should be a compulsory obligation for producing a certain percentage of yarn in hanks. Both handloom and khadi should be encouraged through compulsory government purchases as well as a price preference in favour of the khadi/handloom sectors.

The multifibre approach should be reduced to one of merely meeting the deficit in cotton availability, and not as a part of conscious policy to encourage the growth of multifibre fabrics. The supply of blended yarn to handlooms should be ensured. There is no case for a reduction of the duty on synthetic fibres which may affect the interests of the cotton growers adversely.

There should be encouragement given to the hand-made carpet weaving and barrack blankets industry in the same manner as for khadi and handlooms, and expansion of capacity for mill-made tufted carpets should not be allowed even for export, as they would impinge on the supply of indigenous woollen yarn for the decentralised sector.

Controlled expansion of spinning capacity in the woollen industry should be allowed to meet the needs of hosiery and similar knitted woollens industry.

When there is short supply of raw cotton and need for import of man-made fibres, the import should be through the STC on a well regulated basis so that the requirements of the decentralised sector can be met.

Distribution of controlled cloth should be linked to the distribution of other essential articles to the target group.

The varieties of cloth to be subsidised for distribution should be such as are purchased by the lower income groups and supplied through shops located in areas where low income people generally live.

A large number of controls at present on the statute book in respect of the textile industry are redundant and should be removed. The control law should be succintly brought out in a comprehensive document.

The office of the Textile Commissioner should be wound up and the residual control functions — including powers of prosecution for violation of government orders — should vest with a Textiles Development Board, in charge of the coordinated development and regulation of the entire textile industry, covering khadi, handlooms, powerlooms and the mill sector.

Jute

In order to resolve the problems of both the growers of raw jute and the jute industry, the committee has suggested that there should be monopoly procurement of raw jute by the Jute Corporation of India. In undertaking this task, the Jute Corporation should seek the help of local authorities and build up an organisation suited to each of the jute growing areas in consultation with the state government and other concerned authorities.

In order that the Jute Corporation is made fully responsive to the needs of the situation, it should be converted to a joint sector organisation in which, apart from the central government, the governments of West Bengal and other jute growing states may hold shares with possibility of some shareholding also by cooperatives of jute farmers or other organisations of jute growers. The Jute Corporation should seek the assistance of organisations like the Indian Jute Research Institute for the grading of raw jute. The Jute Corporation should also be put in a position to build a buffer stock of raw jute so as to stabilise the price and availability of jute to the industry, the carryover stock of raw jute at the end of the season being a minimum of 10 lakh bales.

Prices of raw jute should be determined by an independent body like the Agricultural Prices Commission after careful consideration of price parities between jute, paddy and other competing crops.

A number of formal controls

on the jute industry can be phased out. The scheme for registration of export contracts, however, may be continued.

Fertilizers, Pesticides

Price control on fertilisers, the committee thinks, has to continue because of the widely divergent cost of production of different units based on different feedstock. Some relaxation in the control on distribution/movement of fertilisers, however, is called for so as to have flexibility to the producers to sell outside their command area.

The subsidy on fertilisers on a long-term basis should not continue but cannot be given up suddenly and should be eliminated only in a series of steps over a period, say, five years. In the meantime, older plants should be given a special allowance for replacement of equipment by putting the pooled price at a level higher than the weighted average retention price, the difference being funded for replacement of equipment of the older units. The subsidy on imported fertilisers should be eliminated by reducing the cost of handling and distribution which appears to be feasible. A separate subsidy for fertilisers could be continued, rather increased, under various integrated rural development schemes.

The subsidy on gobar gas plants, compost pits and composing of urban wastes should be increased in order to improve the availability of organic manure and also to save on kerosene and firewood as fuel and for lighting purposes. The subsidy on gobar gas plants should be available for all designs of gobar gas plants and not merely for designs approved by the KVIC.

There should be national scheme for spraying major crops with pesticides, part of the cost of which should be subsidised.

In determining agricultural prices, note should be taken of the totality of subsidies as well as the cost of inputs so that prices are determined on a realistic basis.

Coal

The price of coal, the committee has recommended, should be determined by an independent authority (like the BICP) with a view to discouraging improvident uses of coal. In the pricing formula, there should be an economic incentive to use slack coal and "middlings", and a disincentive to use the scarcer varieties of coal.

In order to rationalise movement and distribution, as also to resolve disputes as to the price of coal, steel plants should have captive coking coal mines.

Coal dumps should be established at convenient centres (in district headquarters and cities with a population above 50,000).

The overall cost of distribution should be reduced by using ropeways and also by loading wagons in outlying mines and shunting the coal to central points for the formation of rake loads, for which Coal India should own and operate wagons and shunters.

The existing subsidies on sand stowing and other development works are inadequate and need to be increased several-fold either by increasing the cess on coal or by increasing the coal price, and making sand stowing a part of the normal operational routine.

The existing legislations on coal, by way of the Coal Mines (Conservation and Development) Act of 1974, the Coking Coal Mines (Emergency Provisions) Act of 1971, and the Coal Mines (Taking Over of Management) Act of 1973, are all redundant now in view of the nationalisation of the industry. Similarly, the Colliery Control Order of 1945, currently under the Essential Commodities Act, is also redundant.

The Coal Controller's organisation, which does not have any really useful function today, should be merged with the CIL. Coal mining can be selectively allowed to state governments or cooperative societies (particularly in hill areas) supported or sponsored by state governments.

Steel

The tight administrative control over steel prices, the committee has recommended should be relaxed. Government should lay down guidelines indicating the priority sectors (which should be kept down to a very few, possibly only defence needs and export production), the prices to be charged from the priority sectors and other relevant parameters. For the rest, the SAIL should be free to charge prices as per market demand. If any department wishes that steel should be made available to any priority sector at a concessional price, it should subsidise the use of steel by that sector out of its own budget, so that the costs and the beneficiaries of the subsidy can be identified.

The present system of distribution has not worked to the advantage of small-scale industries and the decentralised sector. The small-scale industries corporations should improve their efficiency and reduce costs. In any case, the trade would be in a better position to meet the requirements of the small producer and the small user of steel and should be given a bigger role in steel trade with the safeguard regarding pricing which would reduce the possibility of black marketing in steel.

The import of ferrous scrap should be freely permitted under OGL. The canalisation of steel import should be continued for bulk items and imported and indigenous steel should be pooled and sold at uniform prices. For all "mismatched" steel sections, free import should be allowed.

The complex system of licensing and approvals by the Iron and Steel Controller in the downstream steel industry may be dispensed with. The creation of capacity in the steel industry—other than in respect of integrated steel plants—should follow the same procedures as for all other industries, namely, there ought to be a banned list, a free list, and a restricted list to be licensed on merit. The functions of the Iron and Steel Control Organisation should be merged with the SAIL or the JPC, the recommendatory authority in regard to the capacity being the technical wing of the department of Steel. The Steel Priority Committee as well as the Iron Ore Board could also be wound up.

Aluminium

In regard to aluminium, there should be a more realistic system of power rates for all aluminium smelters which should be based on the opportunity cost for power and not on the cost of generation of any one power station feeding a particular smelter. This would, in turn, require price pooling until this major input cost for all producers is more or less equated. The changes should be made in gradual steps over a period of, say, five years so as to avoid the shock of sudden change and to allow a period of transition.

The divergent capital costs of new and old units could be allowed by way of excise duty rebates or similar fiscal adjustments. This would enable the price of aluminum to be freed from control in course of time, so that there is incentive for greater efficiency of production. In the meantime, there should be a uniform pooled price with different retention costs for different units.

A buffer stock of, say, approximately 20,000 tonnes should also be built up so that the management of supply could ensure continued availability of aluminium and a truly competitive price of the metal could emerge. Production control on the quantum of EC grade aluminium to be produced should continue to ensure availability.

Copper

In the case of copper, with the only producing unit in the public sector having a higher cost of production than imported copper, a "managed" price should continue. The canalisation of import of copper — which has in any case proved to be beneficial—should continue.

In order to ensure a fair price of copper, which can also be sustained, a buffer stock of, say, approximately 30,000 tonnes should also be built up, taking advantage of downward swings in international prices for inventory build-up.

Copper prices should be announced after pooling the prices of indigenous and imported copper on an annual basis. There should be suitable price differential between special high grade electrolytic copper wire bars and ordinary fine refined copper.

Zinc

For zinc, there is similar need for managed prices and of pooling of prices. In pooling zinc prices, however, distinction should only be made between pricing of zinc based on imported concentrates—which is normally linked to the international price of zinc—and pricing of zinc based on indigenous ore mining. Other considerations should not be brougbt to play in price determination A buffer stock of, say, approximately 25,000 tonnes of zinc metal should also be built up. Canalised import should also continue for zinc.

Cement

There should be no licensing control in respect of cement expansion. While price and distribution controls and freight pooling cannot be given up, differential retention prices should be worked out so as to encourage the creation of capacity in deficit areas. A special allowance of at least Rs 20 per tonne of cement should be allowed to producers —increasing the price of cement by rupee one per bag—and the proceeds funded to be released for expansion of the industry.

In the pricing formula, split locations should be encouraged so that grinding plants can be set up nearer the consuming centres. The manufacture and use of pozzolana cement should be encouraged.

There should be increased emphasis on setting up capacity for grinding cement, to be fed initially by imported clinkers, which government is already considering. There should be freer import of technology for purposes such as precalcination of cement with a view to increasing output at minimal investment cost.

Rules regarding building and construction should be changed to permit construction of buildings with substitute materials like lime mortar, and at the same time, the use of cement for ostentatious and low priority purposes should be banned. Also five-star hotels and similar multi-storeyed buildings may be asked to pay the full import price of cement.

Gold

The committee has recommended amendment of gold control and total prohibition of manufacture of gold ornaments above 18 carats purity. To meet demand for 18 carat gold, the committee wants government to import gold. It has also suggested revival of gold bonds.

The committee feels that there is a need for a separate list of reserved items for decentralised sector, especially for artisans and cottage industry type workers. This list will include all dhoties and sarees with border, all carpet weaving, shawls, blankets, certain types of leather and PVC products, soap and matches. The committee has further recommended that there should be a separate list for government and public sector purchases exclusively from cottage and village industries.

For adequate supply of raw materials for the decentralised sector, the government should ensure that (a) a part of the supply of raw materials is available for the decentralised sector, compulsorily if necessary; (b) the cost of these raw materials to the decentralised sector is no higher than to the mill sector through a subsidy, if necessary; (c) the quality of raw materials supplied to the decentralised sector is not inferior to the quality of raw materials available to the organised sector. State or district level institutions of repute should stand guarantee for the production and marketing of the products of the decentralised sector.

Credit Control

In regard to credit control, the committee has suggested steps to make available adequate credit speedily to small producers at reasonable commercial rates of interest. It says that 20 per sent of the additional credit should be deployed to decentralised sector.

The committee feels that controls, particularly on price, without an adequate machinery for distribution, leakages in distribution system, rent control, etc, are the main sources of black money. To check the expansion of black money, the committee has recommended that to the extent possible, other alternative policies like buffer-stock operations and fiscal policy should be used. There is need for a small list for restricted items involving individual discretion.

The committee has urged that at the national level all controls and subsidies should be monitored in Planning Commission. Similar monitoring of controls should be undertaken by state planning boards. The committee has further recommended that monitoring of prices and distribution control should be made easier and should be made more efficient by organising citizen councils in each area and also by involving organisations like chambers of commerce and industry for undertaking voluntary regulation of the conduct of their members.

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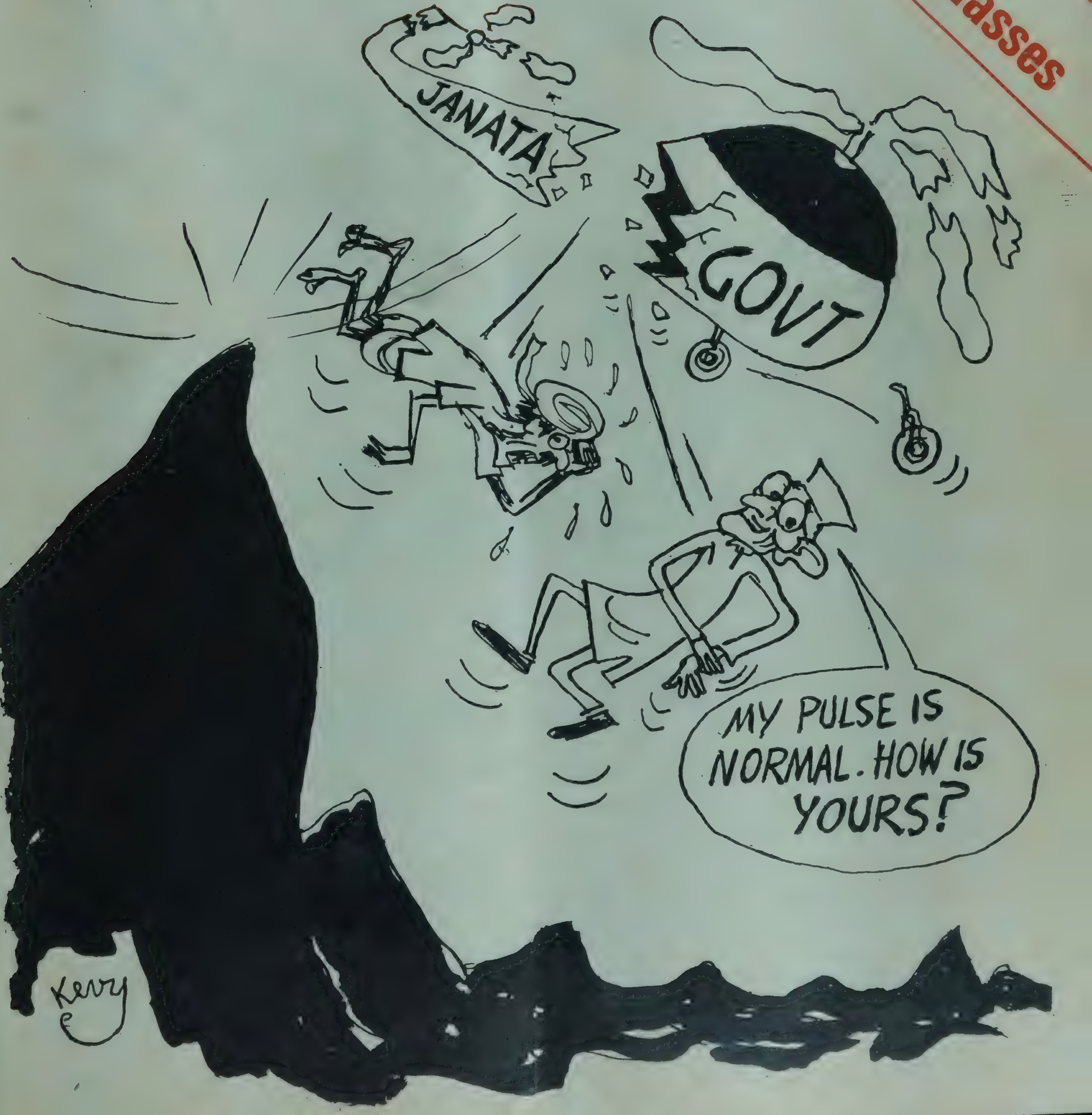
JANATA
GOVT
MY PULSE IS NORMAL. HOW IS YOURS?
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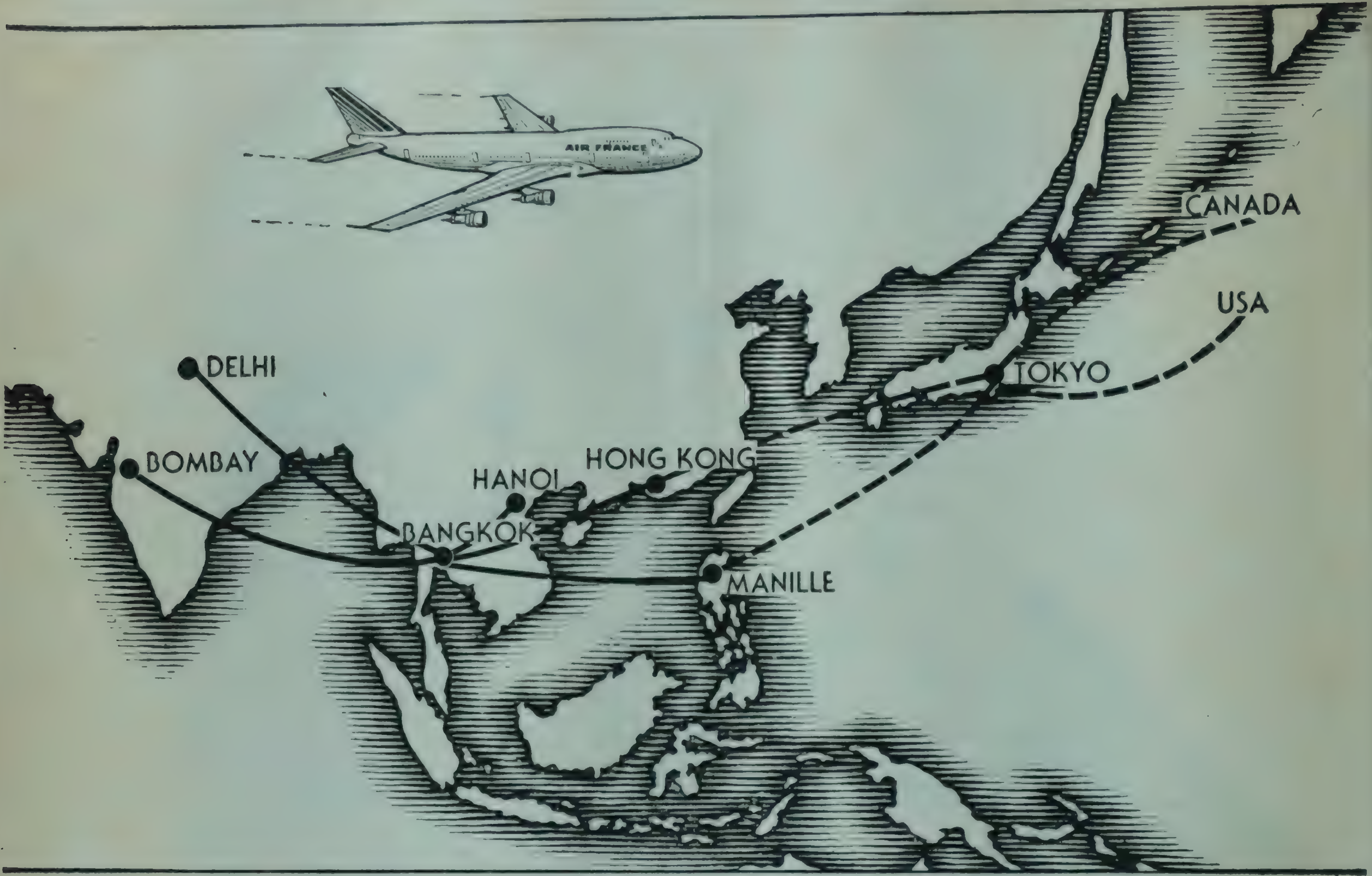
From India to the Far East.



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ECONOMIST

In the nation

Search for new prime minister

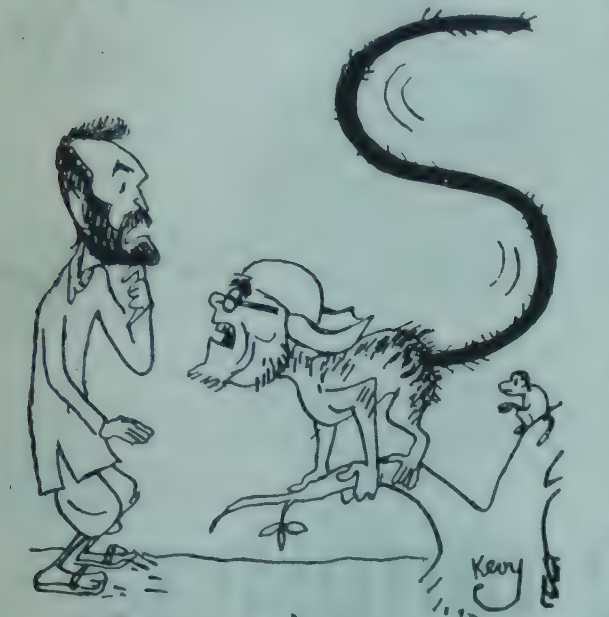
Mr Morarji Desai stepped down from the prime ministership on July 15, 1979, after a tenure of about 28 months. He has been asked by the president, Mr N. Sanjiva Reddy, to head the caretaker government till alternative arrangements are made. In deference to constitutional propriety, the leader of the opposition, Mr Y. B. Chavan (Congress-S) has been called upon to form the new government. Mr Chavan has expressed the hope that he will be able to do so, but has desired that three or four days should be allowed to him for mustering enough support to lead the nation.

Mr Desai resigned on Sunday even though the no-confidence motion against his cabinet, brought forth in Lok Sabha by the opposition leader, had yet to be voted upon the next day. He, thus, forestalled his defeat on the floor of the house. The decision to step down, it has been explained, was prompted by the fact that by Sunday Mr Desai had found that his party had been reduced to the minority position following large-scale desertions during the preceding six days. From 303 in a house having an effective strength of 538 members, the support of the Janata party and Mr Desai had been reduced to 215/220. There were also reports that some further desertions could not be ruled out if the prime minister refused to submit his resignation. An important ally of the government, the 22-member CPI(M) group too had declared that it would vote for the censure motion. Doubts had as well arisen regarding the support of the other ally —the 9-member Akali Dal.

Efforts were made by Mr Desai to seek support from several other quarters, including the Congress(S) and the AIADMK. While the AIADMK evinced inclination to support the government, it appeared to be shifting from this stand later on. Mr Chavan, who leads the Congress(S) in Lok Sabha, expressed his inability to come to Mr Desai's help for the simple reason that he himself had tabled the censure move.

Amongst the Janata party members who decided to leave the party were included an overwhelming majority of the BLD group, headed by the deputy prime minister (Finance), Mr Charan Singh, (he himself, however, resigned from the government on Monday) and the ministers for Industry, Steel and Mines and Petroleum and Chemicals, Mr George Fernandes, Mr Biju Patnaik and Mr H.N. Bahuguna, along with some of their followers and friends. The exodus was initiated by the former Health minister and a trusted lieutenant of Mr Charan Singh, the irrepressible Mr Raj Narain. The BLD members who went out of the party with Mr Raj Narain included Mr Rabi Ray (who had succeeded him in the Health ministry), and several ministers of state—Mr Bhanu Pratap Singh, Mr Janeshwar Misra, Mr Jagbir Singh, Mr Fazlur Rehman, Mr Zulfiquarulla, Mr Narsingh and Mr Ram Kinkar. No further desertions have been reported after Mr Desai's resignation. The Janata party continues to be the largest in Lok Sabha with about 218 members, comprising the erstwhile Jana Sangh, the Congress(O). the Madhu Dandavate socialists, the followers of Mr Jagjivan Ram in Congress for Democracy and some 22 BLD members (most of them belonging to the erstwhile Swatantra party which had merged with the BKD to form BLD).

Although according to the norms of constitutional propriety, Mr Chavan has been called upon by the president to form the new government and he has expressed confidence in his ability to do so, the present structure of Lok Sabha and the stances publicly adopted by various parties and groups do not evoke optimism that he will be able to muster adequate support to provide a stable government. The invitation to Mr Chavan has caused a good deal of resentment in the breakaway BLD group which styles itself as Janata (Secular). The reasons for this resentment are not far to seek. The toppling game was started by Mr Raj Narain as an attempt to install his mentor as the prime minister. In fact, claiming that Janata (Secular) is the largest party in the house (on the consideration that the Janata party is a conglomeration of five constituents), Mr Charan Singh had requested the president to ask him to form the new government. Interestingly enough, the Janata (Secular) has put out two figures of its strength—91 and 87 members. Presumably, the idea has been to show its strength as one or two members more than the Jana Sangh group whose strength earlier was said to be 90 members and is currently talked around 85/86 members. (All the other parties and groups have smaller memberships.) The expectation apparently was that after the fall of Mr Desai's government, the various contituents of the Janata party would fall apart. But this has not happened as yet.



JANATA 'S'

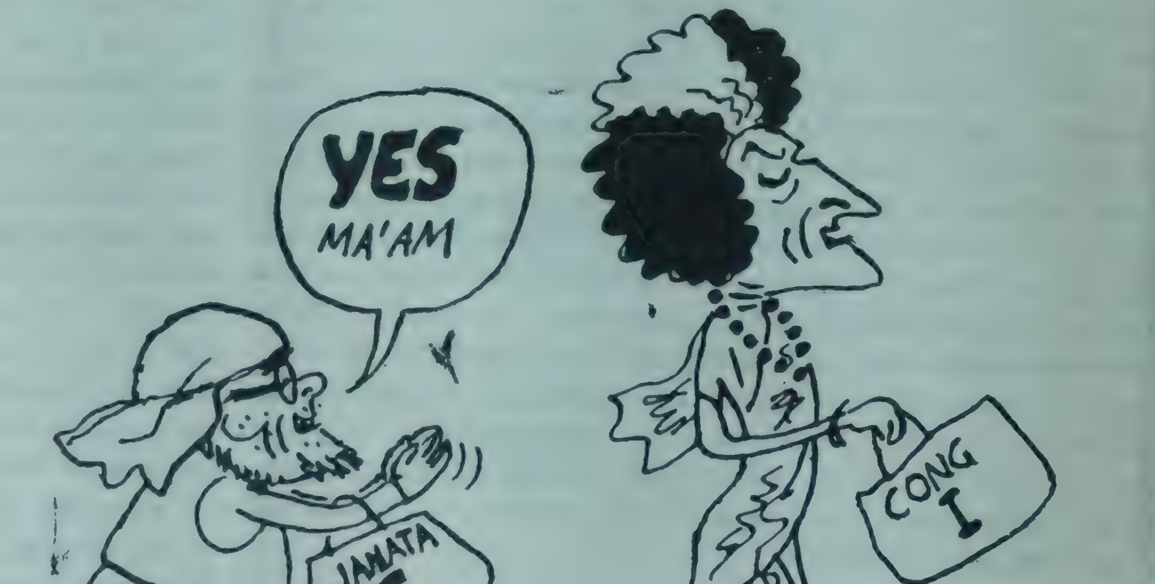
Mr Charan Singh, indeed, has been making strenuous efforts at mustering the requisite majority of 270 members to form the new government. But reports indicate that he has failed to do so. He has tried to gather support from all the parties and groups, excepting the Janata. That obviously has created complications. Some groups, particularly the CPI(M) and the AIADMK, have yet to take the final decision on whom to support. The CPI(M) and the other leftist groups have already declared that they will not support any government which is backed in any form by the communal forces allegedly represented by the Jana Sangh and the authoritarian forces with which the Congress(I) has come to be associated. At one time, the Congress(S) was understood to have promised on the basis of consensus, its support to Mr Charan Singh. But that would have led to a split in this party also because quite a sizeable section of it is said to be adverse to joining hands with the Congress(I) in supporting the new prime minister.

Mr Raj Narain's campaign has ostensibly been against the Jana Sangh, which he has styled as a communal organisation and to fight which he would not desist even from securing support from the Congress(I), to fight whom he and his party men, including Mr Charan Singh, had joined hands even with the now so-called communal elements to found the Janata party in 1977. This is the reason why the anti-Jana Sangh stance of the BLD is being construed as only a facade, the real intention behind it being to prop up Mr Charan Singh as the prime minister.

By virtue of its being the largest party in Lok Sabha, Janata also is to stake its claim for forming the new government. But it is problem-ridden at present because of Mr Desai's unwillingness to relinquish the leadership despite the pressure being brought upon him to yield ground to a new leader. Mr Desai has asserted that he has not yet been voted out as the leader of the Janata party and can still form a new government with support from some other sections of the house. But feeling is growing that the consequences of this posture of his will be grave. Some more members may leave the party reducing its strength further. The president too has pointed out that Mr Desai is a defeated prime minister.

Mr Jayaprakash Narayan has written to Mr Desai and the Janata party president, Mr Chandra Shekhar, that Mr Desai should step down from the leadership of the party in parliament in favour of Mr Jagjivan Ram who, he thinks, can muster enough support to head the new Janata government. Mr Desai, however, has still not relented. He feels hurt that he is being asked to yield place to a person who at one stage was thinking of leaving the party,

Efforts, of course, are still being made to persuade Mr Desai to step down in favour of a new leader. The Janata parliamentary party's meeting has been postponed once to enable a consensus being reached. A consensus is considered necessary because there are fears that if the leadership issue is forced and Mr Desai does not step down voluntarily, some members of the Congress(O) constituent of the party may decide to leave it. Mr Jagjivan Ram apparently has the best



chances—of course, if the ranks of the Janata party do not get thinned further.

The above should suggest that the situation continues to be very fluid and the formation of the new government may take quite some time. It, indeed, is unfortunate, rather astounding, that those who indulged in the toppling game went in for it in a cavalier manner without first doing their hometask and straigthening out the numbers so that the transition could be smooth. Perhaps, they depended more on astrological predictions. At the present juncture, a mid-term poll too cannot be ruled out even though majority of the members of parliament are not in favour of it. The public pronouncements of various groups and parties have driven them into rigid positions from which it may be difficult for them to riggle out. It remains to be seen whether the overall interests of the nation will reassert themselves and eclipse the factional ambitions of some politicians to pave the way for a new government to be formed which will remain in power till the next general election in 1982.

FICCI Recipe for Growth

IN A study entitled "Industrial Production: Solutions to Shortages", the Federation of Indian Chambers of Commerce and Industry has very appropriately pointed out that the serious difficulties and deficiencies that have developed recently in the three core sectors of coal, power and transport have contributed to a large extent to the present shortages of various industrial products. Significant contributions to this phenomenon have also been made by the continuing deterioration in industrial relations and inefficient management over a wide front. The shortages have created a vicious circle.

The diagnosis of the Federation that imports to meet the yawning gap between demand and supply could at best be a short-term solution too is not unjustified. While it is true that with a view to containing the inflationary impact of the sizeable inward remittances by non-resident Indians, some larger imports may have to be planned, especially in areas where the creation of new capacities in the country will take a long time, the only lasting solution to shortages lies in augmenting indigenous capacities. The Federation has rightly emphasised that resort to imports by delaying the commissioning of new plants or under-utilising the existing capacities amounts to financing employment abroad at our cost. The national interests obviously should come first, especially when there is a large backlog of employment to be wiped out in a situation when the new entrants in the labour force are also multiplying fast.

continuous interaction

From the short-term point of view, the Federation has suggested that there should be continuous interaction between the government and business so that all possible measures can be taken expeditiously to augment output and to curb the psychology of shortages. The other measures suggested include: (i) the re-introduction of the excise duty rebate on production in excess of the level in a base period; (ii) expeditious remedying of the situation on coal, power and transport fronts; (iii) containing of labour unrest; (iv) improving of capacity utilisation through additions of limited quantities of balancing equipment; and (v) not allowing restrictions on money supply to affect production.

Notwithstanding some improvement in power supply last year, the production loss due to power shortages, the Federation estimates, has been as large as Rs 4,000 crores. The production of coal last year fell short of even the lowered target of 106 million tonnes by as much as four million tonnes.

From the medium and long-term points of view, the package of measures recommended includes: (i) grant of remunerative prices to make new projects viable; (ii) price escalations on a quarterly basis for commodities subject to price control; (iii) waiver of convertibility clause under which loans from financial institutions can be converted into the equities of the loanee concerns: (iv) selective liberalisation of the debt-equity ratio norms; a
(v) reorientation of industrial policy
creation of productive capacities on
sustained basis.

Remunerative prices for new projec
the Federation has suggested, can be e
sured through such measures as exc
duty rebates, lower interest on term loa
provided to production units, and dut
free imports of machinery and equipme
not produced within the country.

Improving of infrastructure facilit
over a long perspective and expansion
the system of buffer-stocking to as ma
commodities as possible in the interest
sustained growth in production have al
been stressed.

The Federation has pointed out th
new investment in the economy has n
been very encouraging in 1976-77 a
1977-78. Investments in these two yea
even fall short of savings. Although t
investment climate was slightly better la
year, the tempo had not picked up suffi
ently. Adequate new investments are n
taking place because of the non-viabil
of new projects as project costs have go
up sharply. The terms and conditions i
posed by public financial institutions,
has been stressed, have seriously affect
the flow of finance to industries.

debt-equity ratio

It has, therefore, been suggested th
these terms and conditions should
modified by raising the debt equity ra
to 4:1 for capital-intensive projects. Co
version of loans into equity should
avoided where the share capital of
enterprise held by the public financ
institutions is more than 25 per ce
Besides, the promotors' contributi
should be limited to 10 per cent of
project costs in the case of all compani

It has also been recommended that i
ports of secondhand machinery shou
be allowed to all, including the MR
units. The capital costs of new proje
should be subsidised through cap
grants, as is being done in the Uni
Kingdom.

The Federation has as well pointed
that the Constitution (49th Amendme
Bill, which is before parliament at

sent, if enacted, would seriously affect the existing network of distribution, retard free flow of supply and threaten security of employment to persons engaged in branches of all concerns.

Food for work

A RECENT review of the Food-for-Work Programme suggests that thanks to the modifications effected in this scheme early last year, it has registered impressive progress. The plea for the continuation of this programme without dilution, as envisaged for the current year needs to be judged against this background.

A total quantity of 1.619 million tonnes of foodgrains was allocated for the programme last year. Of this, 1.4 million tonnes were released till March 31. The quantity utilised by the various states was around 1.2 million tonnes, worth more than Rs 165 crores. The employment generated through the works undertaken under the programme amounted to nearly 28.28 million mandays.

The central government has committed to release 1.5 million tonnes of foodgrains for the programme this year. In view of the comfortable stock with the government, thanks to the recent rabi procurement, the programme might even be enlarged should the next kharif crop turn out to be normal. The recent fears in some circles that the programme might be curtailed primarily had their genesis in the misgivings about the next kharif crop arising out of delay in the onset of monsoons.

Amongst the states where implementation of the programme has been quite encouraging are included Rajasthan, Bihar, Orissa, Andhra Pradesh, Madhya Pradesh, Maharashtra and Uttar Pradesh. Rajasthan was allocated last year 2.61 lakh tonnes of foodgrains out of which it utilised 2.5 lakh tonnes. The utilisation in Bihar and Orissa, each of which had been allocated two lakh tonnes, similarly, was impressive around 1.82 lakh tonnes, respectively. Madhya Pradesh had utilised the entire allocation of 1.25 lakh tonnes, Uttar Pradesh slightly over one lakh tonnes out of the 1.36 lakh tonnes allocated and Maharashtra 52,240 tonnes out of allotted 71,000 tonnes. Andhra Pradesh had made use of 93,430 tonnes out of an allocation of 1.46 lakh tonnes.

The performance of West Bengal and Kerala, however, left much to be desired. The former had been allocated 2.05 lakh tonnes, but it could utilise only 1.3 lakh tonnes. Kerala utilised only 8,174 tonnes out of an allocation of 50,000 tonnes. Gujarat's performance was slightly better. It could use 15,968 tonnes out of an allocation of 50,000 tonnes. Punjab was provided 63,000 tonnes out of which it utilised 36,713 tonnes. Although the exact utilisation figure for Karnataka is not available, the progress in that state is said to have been fairly satisfactory. Like Kerala and Gujarat, it had also been allocated 50,000 tonnes. Haryana used 15,903 tonnes out of an allocation of 40,000 tonnes.

The programme has been utilised for various Plan and non-Plan works' as well as for the creation of the durable community assets. These include maintenance of public and community works, construction of irrigation projects, flood protection and drainage, soil and water conservation, land reclamation, afforestation and social forestry works, construction of rural roads, panchayatghars, community centres and schools and dispensary buildings and drinking water supply schemes.

employment generated

The employment generated through the programme has been of the following order—(in lakh mandays) : Andhra Pradesh—156.5; Bihar 77.72; Gujarat—37.76; Haryana—24.76; Himachal Pradesh—1.205; Jammu & Kashmir—5.83; Karnataka—44.71;Kerala—24.993; Madhya Pradesh—450; Maharashtra—977: Orissa—175.64; Punjab—49.93; Tripura—29.65; Uttar Pradesh —223.32; Rajasthan—481.16; West Bengal—67.65; Mizoram—1.1.

The assets created have been as follows :

Andhra Pradesh : 1,056 kms of new roads constructed; 2,859 kms of roads gravelled; 311,27 km of roads metalled ; community development works 292; new school buildings 16; repair of old buildings 154; minor irrigation works 134.

Bihar : Roads constructed 3,297 kms ; 12,566 hectares brought under minor irrigation and 200 hectares under major irrigation; flood protection to 1,200 hectares; 1,846 lakh c,f.t. of earthwork; plant protection over 145.12 kms; nurseries created over 24.07 hectares: weeding operations over 365.32 kms.

Gujarat : 29,488 hectares maintenance and repairs under major, medium and minor irrigation works; 96,000 cm excavation works under medium and minor irrigation works; 172,092 cm earthwork; new plantation 1,356 kms and 2,319 hectares; maintenance of plants 927 kms and 4,155 hectares; weeding over 1,440 hectares; filling of one lakh plants and watering to 25 lakh plants, 135,912 kms maintenance and improvement of roads; 1,500 hectares field channel works; and 500 hectares land levelling works.

Haryana . 100 kms of roads construction; 645 kms check drains; 628 Harijan chopals; 7.44 lakh cu. ft. earthwork; 71 village ponds renovated and reclaimed; six community centres and panchayat ghars constructed.

Himachal Pradesh : 17 maintenance schemes and 18 new projects.

Jammu and Kashmir : 1312 kms of road construction; 776 acres S.C. and 279 bridle path ; 10 khuds; 29 lanes; 47 ponds; one school building; two panchayat ghars; two *Bowlis*; one club; 17 kms bund construction.

Karnataka : Repairs to 263 MI tanks; construction of Hidkal dam (it was brought to completion); some repair and some new works; plantation in 693.35 hectares.

Kerala : Minor irrigation 369 hectares; 12 tanks renovated; 11 kms of bunds completed; 263.14 kms. of roads, 19 culverts and 8 retaining walls constructed: 60.15 kms of roads improved; 37 road repair works completed.

Madhya Pradesh : Several major, medium and minor irrigation works; 371 soil and water conservation and afforestation works on government and community lands, roads development; construction of two intermediate and main drain field channels and land levelling, etc, in the irrigation command areas; 1,458 school buildings and community centres belonging to the government, local bodies and panchayats. Part of the allocation was used for guaranteed rural employment programme.

Maharashtra : 172 minor irrigation tanks; 412 percolation tanks ; many other minor irrigation works completed; contour bunding 255,000 hectares; 1,660 nalla bunding works; 1,990 kms of roads construction; land development of 29,000 hectares of command area of major and medium projects.

Orissa : 1,174 hectares minor and medium irrigation projects and 8,230 acres under Ayacut earth works—905,301 CuM; 9,420 kms of road repairs and manintenance; 16,905 hectares old and 100 hectares new plantations ; 9 new channels constructed and 554 repaired; 25 schools constructed and 450 buildings repaired; construction of 38 wells and 4 tanks and repairing of 550 wells and 240 tanks.

Punjab : 38 hectares SC works; 124.22 kms development of land.

Uttar Pradesh : 3,075 kms of link roads; 36 kms drainage; 3,155 kms earthwork; 25 kms metelling, 96.31 kms construction of culverts, 27,146 hectares soil conservation and plantation.

schools and hospitals

Rajasthan : 5,675 irrigation tanks completed and 853 under construction; 90,733 kms of roads completed and 2,319 kms under construction; 3,051 schools completed and 4,576 under construction; 305 hospitals building completed and 393 under construction; 789 panchayat ghars completed and 1,271 under construction ; 4,991 drinking water tanks completed and 2,719 under construction.

West Bengal : 11,658 kms of roads improved; 20,130 hectares benefitted under major, medium and minor irrigation by new schemes and improvement of schemes, 453 kms of embankment improved, 670 hectares of land reclaimed, 905 school and community buildings improved.

Mizoram : Construction of 40 school buildings, 3 fair bridges, 63 common halls, 22 playgrounds, 19 water tanks and 9 craft centres; Agril lines road—444 kms; and urinal sheds 10.

Power for Ashok Mitra

THE POWER situation in West Bengal in July continues to be almost as unsatisfactory and uncertain as in the recent months. No one, of course, had expected any major improvement. But what is really regrettable is the rude rebuff that was given by Dr Ashok Mitra, the Finance minister, to a task force, set up by the Association of Indian Engineering Industry, to examine the working of the power plants of the state electricity board and to make recommendations for their efficient functioning. The composition of the task force and its terms of reference had been settled by the chief minister, Mr Jyoti Basu, before he left on his European tour in the last week of June. But Dr Mitra, who was given the additional charge of power, felt hurt when the task force reached Santaldih without his knowledge and approval. He therefore ordered the immediate recall of the task force. This incident has created much resentment in industrial circles who feel that their efforts to solve the power problem by offering their advice and assistance have been spurned with contempt. Dr Mitra has dismissed the episode as one of minor consequence. Nevertheless, the fact remains that it has certainly affected the image of the United Front government. Mr Jyoti Basu's approach to the private sector has been generally constructive and positive unlike that of Dr Mitra who seldom conceals his prejudice to it.

It seems unlikely that the task force will be revived. Even if it is allowed to visit the power plants, it indeed is doubtful if any goodwill come out of it. The technical problems have been identified by several expert teams from the Central Electricity Authority and the Bharat Heavy Electricals, but the state government has not been able to implement their recommendations effectively. Mr Jyoti Basu

eastern ECONOMIST
Vol 73 No. 3 July 20, 1979
Price Rs 2,50

IN THE NATION 115-121
Search for New Prime Minister
FICCI Recipe for Growth
Food for Work
Power for Ashok Mitra
Tamil Nadu Follows West Bengal ?
Bait from Bhubaneshwar

WINDOW ON THE WORLD 123-126
Russia Plans for Quality
Economic Crisis in Egypt ?
Britain's North Sea Bonanza
Czech Agriculture in 2000 AD
FAO Meet on Rural Poor
Muzorewa Snubbed

SPECIAL FEATURE 128
Energy for the Masses

POINT OF VIEW
UNCTAD Unrealism—*Sudhir Sen* 137
Interstate Disparities in Educational Development—*Jandhyala B.G. Tilak* 140

TRADE WINDS 147

COMPANY AFFAIRS 151

COMPANY MEETINGS
J.K. Chemicals Ltd. 154
United Industrial Bank Ltd 156

RECORDS & STATISTICS 157
Deteriorating World Economic Situation

himself has declared on many occasions that there has been no proper coordination among the different agencies dealing with the power problem. The fierce inter-union rivalry has also stood in the way of effecting improvements in the working of the power plants.

sabotage alleged

Meanwhile incidents of sabotage continue to be reported. In the last week of June, sabotage was alleged at the Bandel plant. Consider, for instance, the following report which appeared in the *Statesman* of July 1: "The sabotage at Bandel showed that officials who are supposed to move about the plant rarely do so. According to the government's reports, the ID fans in the third and the fourth units were damaged with hammers which, it is felt, would not have been possible if there was proper vigilance".

On July 3, reports appeared in some newspapers that attempts had been made to damage the auto transformer and its nitrogen seal equipment at the gas turbine project site at Kasba. Dr Ashok Mitra, however, declared that it would be unfair to allege that there was sabotage at the Kasba gas turbine unit. But on July 5, the *Statesman* reported that "the West Bengal government had registered a case of sabotage, mischief and conspiracy in connection with attempts to damage the auto transformer of the Kasba gas turbine project".

Against this background, will any useful purpose be served if the private sector again volunteers to offer its expertise to the government in regard to the functioning of the power plants? Unless the state government tackles the various problems relating to the power shortage with realism and imagination, the situation will continue to be critical. Take, for instance, the government's decision to exempt from electricity duty the power produced by the industrial units in their own diesel generating sets. Over two years ago, Mr Jyoti Basu had assured industrialists that the government would sympathetically consider this request. It was only on June 11 this year that the government issued an ordinance providing for such exemption. The details of the ordinance were made available to industries only in the beginning of July.

But this concession is available only for one year with effect from June 1, 1979. The government perhaps may review it for another year, but this will, of course, mean more delay and uncertainty. Why did not the government announce this benefit at least for a period of, say, three years at a stretch? In any case, not many industrial units are likely to avail themselves of this facility because of the high cost and the shortage of diesel oil. The hundreds of small units in Howrah and other parts of the state have been severely affected by the chronic shortage of power and to them this concession will be of little use. It is only when the government is able to enforce some discipline at all levels in the working of power plants that the existing capacity can be effectively utilised and the new projects can be commissioned according to schedule.

Tamil Nadu follows West Bengal?

THE HAPPENINGS on the labour front in Tamil Nadu in the recent months do not augur well for strident industrial development of the region. After a period of slumber, there are signs of revival in industrial activity and the managements of many establishments are inclined to embark on new and expansion schemes. But they are also worried about the new trends in labour unrest as an increase in the wage bill, unaccompanied byimprovement in productivity, will erode ability to compete. The apprehensions on this score have been even encouraging dispersed location of industrial capacity. The entrepreneurs in Tamil Nadu are, thus, seeking outlets in Karnataka and Andhra Pradesh which have a more congenial industrial climate. There are even proposals for moving to advantageous locations in north India.

The greater enterprise being shown by industrialists in Tamil Nadu is to be welcomed, as the state had been losing its importance in recent years as a highly developed region laying emphasis on continuing growth. The depression in the textile and sugar industries and unprofitable working of the automobile industry discouraged bold planning for expansion and formulation also of entirely new schemes. These difficulties are being overcome and with flourishing textile, automobile and ancillary industries, there is a disposition to embark on new schemes, especially as finance from institutions can be secured in the required volume. It is also easy to raise fresh capital from the open market and the existing shareholders through new and right issues. There is besides a desire to branch out in new directions by undertaking the manufacture of electronic components, new intermediate chemicals, leather products, alcohol-based chemicals and the like.

encouraging trends

These trends are certainly encouraging. But the managements of many industrial groups are disturbed over labour's attitude and ineffective use of the existing capacities because of disputes over workloads and the content of incentives. The TVS group in Padi encountered serious labour trouble in 1978 mainly due to inter-union rivalries. The interruption to operations of those units, which were supplying a large proportion of particular components required by the manufacturers of automobiles, seriously hindered the functioning of various automobile units and makeshift arrangements had to be devised for preventing a drastic fall in production. Imports also were secured temporarily for meeting the urgent needs of customers.

While TVS group is thinking of overcoming its disabilities with an improvement in productivity and dispersed location of new capacity, the Rane group also is having similar problems. Even with the payment of attractive wages, there is a prolonged lock-out in the factory of engine valves due to inter-union rivalries. The Amalgamations group is badly hit by recurrent labour trouble.

After the bad patch during the previous regime, there was smooth sailing for two or three years. However, in spite of the highest wages being paid in some establishments in the group, productivity has been a casualty even with the grant of group incentives. The members of the top management assert that labour is working only for about 50 per cent of the shift and there can easily be a doubling of production in many units with the same capacity. The latest dispute is over an upward revision of basic wages without any increase in productivity. The managements feel that the increase in the wage bill in the past three years has been heavy and no net increase in the unit cost of labour can be contemplated without prejudicing the competitive ability of the establishments concerned. While marginal increases in the basic wages can be contemplated, it is emphasised that there will have to be an improvement in productivity for augmenting incomes of workers.

The management is understandably unwilling to implement new schemes on vertical or horizontal basis and is seriously examining how its problem of high wage-cost can be solved by farming out the manufacture of components or encouraging the promotion of small units with the provision of equipment, technical guidance and the like. Similar experiments by the Enfield group in the past were not successful and bad planning, inefficient management and high labour cost eventually resulted in the building up of heavy losses. It was only after a long period of closure and hard bargaining that labour is co-operating with the management and the units are limping back to normalcy.

politicising the problem

The strike in the textile industry, which has cost workers, shareholders and consumers, heavily, is another instance of politicising labour problems. There was really no justification for a prolonged strike when it was acknowledged that the workers in Tamil Nadu were in receipt of emoluments much higher than their counterparts in other regions.

The machinations of the opposition leaders have injured the interests of workers and the health of the regional economy. The trouble on the farm front also is politically motivated as it can not be said by any stretch of imagination that farmers in Tamil Nadu are having special disability. On the other hand, the state under different regimes has always been anxious to promote their interests through subsidies, cheap electricity, lower water rates, extension work, cheap credit and so on. Labour in Tamil Nadu, whether in the factory or in the field, is highly intelligent and hardworking and it will be doing serious disservice to them and to the state if they are misguided and labour costs become unduly inflated. Any disturbance to the work in the field can have serious repercussions on the agricultural economy, while fears of labour unrest and high cost may discourage future industrial development. Tamil Nadu may go the way of West Bengal or Kerala if the warning are not heeded in time.

Bait from Bhubaneshwar

THE GOVERMMENT of Orissa announced on July 5, a package of incentives to encourage entrepreneurs to start new industries in the state and to expand the existing ones. Some of the incentives are quite attractive, especially those relating to the subsidy on power and the interest-free sales tax loans. The existing as well as the new cottage and village industries have been exempted from electricity duty and 20 per cent subsidy will be admissible towards tariff for five years and no minimum charge will be collected. All units which propose to expand their capacity with a capital investment of Rs 25 lakhs will be entitled to 15 per cent subsidy on power tariff for a period of five years from the date of production. In the backward areas, power-intensive units will be exempt from payment of electricity duty for five years from the date of production, while in the other areas this exemption would be limited to three years.

Village, cottage and small units would be fully exempted from the purchase and sales tax for five years on construction materials, raw materials, machinery and packaging materials. Interest-free sales tax loans will be given for such units for six years in backward areas and for five years in the other areas, subject to a maximum limit of 10 per cent of th gross fixed assets each year. The loan repayable af[illegible] years of each yea draw

Information Service
AUG 1975
C.F.T.R.I. MYSORE

lagging implementation

These and the other incentives in t package are more or less on the sar lines as those which are in operation many states. But how effectively will t government of Orissa be able to impl ment them ? Some time ago, the sma scale units of Bihar complained bitter about the indifference of the state gover ment in providing the incentives pr mised to them. In West Bengal als the incentive scheme has not produc the expected results, because, apart fro the shortage of power, the procedures f claiming the benefits have been so tedio and time-consuming.

The government of Orissa, therefor should take particular care to ensu that the details of the scheme are clear spelt out and the procedures also ma as simple as possible so that it will ha the desired impact. Orissa is endow with immense resources of various kin and the state has excellent potential f industrial growth. It will be a pity, ther fore, if these resources are not proper utilised because of government's apath and the lack of infrastructure facilities.

Announcing these incentives, t minister for Industry, Mr H.C. Buxipatr called upon industrial houses all over t country to invest In Orissa liberally ar assured them of all necessary assistanc But industrialists from other states a likely to show interest in Orissa only they are convinced that the latter incentives are more liberal than tho available in their own states. The gover ment of Orissa, therefore, should exami in what respects its scheme can be ma more attractive.

Mr Buxipatra also said that the su pluses generated by the industries Orissa should be invested in the sta itself and that they would not be allow to be diverted elsewhere.

While normally re-investment of prof in the state itself is desirable, there shou be no ban as such on their being utilis elsewhere in certain circumstances.

“criticomments”

IF YOU ARE THE TRUSTEE, WILL YOU CONDONE FRAUD?

Imagine for a moment that you are a trustee of the policy-holders' funds deposited with the Life Insurance Corporation. Managed well, these funds will yield profits. Ninety-five per cent of what is adjudged as the surplus has to be distributed among those who have with-profit policies. Every claim arising out of death will have the effect of reducing the surplus available for disbursement to the policy-holders who trust you to look after their interests.

Before you is presented a death claim which is not quite straight. The insured person who died of cirrhosis of the liver is found to have concealed important details about his medical history while filling up the proposal form. LIC is therefore contesting the claim. As a trustee you are the judge. The following are the arguments:

Claimant: LIC insured the person after a medical examination. Since he passed the medical examination, no contest is valid.

LIC: No medical examination can reveal family history. Statistics have proved that despite satisfactory health, the expectation of life of those whose parents died at an early age due to circulatory diseases like apoplexy, heart attack, etc., is shorter than that of people whose parents lived to a ripe old age. Cases of giddiness, rapid changes in weight, frequent attacks of stomach pain, etc., cannot be brought out by a medical check-up. Some drugs can suppress disease symptoms for a while. The result of the medical examination, therefore, has to be weighed along with the medical history of the person submitted by himself before LIC can decide whether he should be offered life insurance.

Claimant: The objection is frivolous because the person died of liver trouble, whereas the concealment was in respect of tuberculosis.

LIC: This argument is not valid. Had LIC known about the tuberculosis background, it is possible that insurance would have been refused or insurance would have been offered only on payment of a higher premium. Thousands of policy-holders have disclosed their unfavourable medical history in an honest manner and have taken life insurance on higher premiums. Why should their money be handed out to a dishonest person's heirs? A contract of insurance is a contract of the utmost good faith. If it is violated by one party and facts which would affect the judgement of the insurer are not disclosed, the contract itself falls to the ground. A contract which is void or voidable cannot lead to a claim.

Claimant: We are poor people. We have not studied law. LIC has all these lawyers who can argue so well. Should we be denied the money because of some technicality?

LIC: There are thousands of policy-holders who are poor and who have not studied law but have been honest with LIC about their medical history. Honesty does not require education or wealth. The question is whether honest policy-holders' money should be paid to the claimants of persons who try to take unfair advantage of the Corporation.

YOU ARE THE TRUSTEE. YOU ARE THE JUDGE. WHAT WILL BE YOUR DECISION? WILL YOU CONDONE FRAUD?

It is often forgotten that the Life Insurance Corporation is a trustee of the policyholders' monies. Proper management of life insurance business leads to surplus. Most of this has to be distributed to the holders of with-profit policies. As such LIC cannot take an easy-going, indulgent or lax view about payment of fraudulent claims.

Normally LIC does not investigate claims on policies which have run continuously for several years. But when a claim arises within a short time, investigations are made, to ensure that there is no fraud. Luckily repudiation of claim has to be made only in a small percentage of cases, as the following table shows:

Table showing percentage of repudiation of claims

1 Year	2 No. of death claims intimated	3 No of repudiated claims	4 Percentage of (3) to (2)
1975-76	70,987	1,189	1.7
1976-77	72,415	1,400	1.9
1977-78	75,609	968	1.3

LIC is taking all possible steps to ensure that claims do not get repudiated on flimsy, technical grounds. But fraud is a different matter. No trustee can condone fraud. Sympathy and compassion are misplaced in such instances Once people come to know that they can get away with fraud there will be any number who will give it a try. This will affect the very stability of LIC and erode honest policy-holders' bonus and ultimately their faith in the Corporation.

Linc

CC-12

Russia plans for quality

THE ELEVENTH plan of the Soviet Union, covering the five years to 1985, which is being drawn up currently, is envisaged to accord high priority to the development of fuel and energy resources and improving the quality level of such key industries as machine-building and metallurgy, besides continuing to focus attention on the growth of agriculture. The development of industry in general and that of heavy industry sector in particular also is to continue to receive serious attention. Concrete targets under the plan, however, have yet to be decided upon; so also the tentative targets for the longer term perspective up to 1990.

Reports suggest that whereas the western countries today have serious worries about meeting their future energy requirements, the Soviet Union is confidently looking into the eighties and is planning a steady increase in its energy output years ahead. The thrust in this field is proposed to be three pronged.

Work is to continue on further developing the country's main fuel and energy base in western Siberia where rapid advances in oil and gas production are envisaged in the next decade, as well as in the raw materials manufactured out of these natural resources. The volume of work is expected to increase two to threefold.

Much greater importance is now being attached to the development of atomic power. During the five years to 1985, the share of atomic energy is to be considerably raised in the total output of electric power through installation of larger capacities in the European part of the country. A special branch of atomic engineering has been created for this purpose recently. When Atommash—the leading enterprise at present in this field—is fully operational, it will produce annually atomic reactors to an aggregate capacity of 8,000 MWs.

The leading role in the energy sector, however, will still be played by thermal plants which will soon be reaching a capacity of 200,000 MWs. Powerful new thermal electric projects are to be based in the coal-bearing areas. Work has already been started on the construction of such large thermal stations as of 3,600/6,400 MW capacities.

Currently, atomic and hydel power accounts for 40 per cent of the total operational power generation capacity in the Soviet Union. The percentage is proposed to be stepped up significantly during the next decade. New rich fields of less expensive coal are to be brought into production during the next plan period through open-cast mining in the country's eastern districts. The creation of a powerful fuel and energy complex in the Kansk/Achinsk area is to be accelerated.

In the industrial sector, the primary task to be attended to is to speed up
production of highly efficient machi
and equipment based on the lat
achievements in science and technolo
which will help considerably in boost
labour productivity. The aim is to eff
comprehensive mechanisation of
stages of the production processes—fr
manufacturing raw materials to the en
products.

Contrary to the slow growth foreca
in the western world in the metallurgi
industry, the Soviet Union proposes
continue to step up its output of ste
which last year touched 151 million to
Priority, however, is to be given to ra
ing the quality and expandiag the asso
ment of metals and to drastically redu
wastages in their production and proces
ing. Another task to which serio
attention is to be devoted is the impro
ing of the designs of machines, machi
tools and equipment, making them mu
lighter than at present. Besides directi
efforts at boosting metallurgical outp
the eleventh five-year plan will lay a goo
deal of emphasis on a judicious an
thrifty use of metals.

Occupying a special place in the ne
economic programme is the developme
of new areas which are rich in valuab
natural resources. It is planned to accel
rate during the first half of 1980s t
comprehensive economic development
the new districts in Siberia and east Asi

with the scale and schedule of work being unprecedented in world practice. The Baikal-Amur railway is to be put into operation. Traffic is also to be opened on the Surgut-Urengoi and other lines which will allow far more intensified development of the rich natural resources of the Baikal and south Yakutia areas and the far east and western Siberia. Along with the programmes for rapid development of natural resources of these areas—oil, gas, coal, non-ferrous metals, hydro-electric potential and timber—the eleventh plan will contain measures to speed up the growth of industries based on these primary raw materials—chemicals, petrochemicals, aluminium and the other energy consuming forms of production, ferrous metallurgy, fertilisers, machine-building etc.

In the agricultural sector, the basic objective will be to raise the annual grain output by 1985 to 238/243 million tons. By 1990, the grain availability, on an average, is proposed to be raised to one ton per capita throughout the country. The output of meat is proposed to be stepped up to 19.5 million tons by 1985. Considerable increases are planned in the production of other agricultural commodities as well.

Consistent with the requirements of the designed growth in agriculture, the next plan will aim at strengthening the material and technical base in this field. Comprehensive mechanisation of major crops is to be resorted to. The transfer of livestock raising to an industrial foundation is to be accelerated. Electric power per worker in agriculture is to be increased by 60 to 80 per cent.

Economic crisis in Egypt ?

EGYPT APPEARS to be heading for an economic crisis as a result of the Arab boycott. The Egyptian government has recently appealed to the world's main industrialised nations to provide $18.5 billion over the next five years. In a document sent to the seven leaders at the recent summit meeting of the industrialised nations in Tokyo, the government of president Anwar Sadat pointed out that Egypt's overall balance of payments deficit this year could climb to $5.4 billion from $1.9 billion in 1978.

In the first instance, exports might decline by about eight per cent, while imports might drop by about three per cent. Second, there is the probability of remittances by Egyptian workers abroad and tourism being hit badly. Egypt has estimated that remittances may decline by $1.125 billion and tourism earnings by $450 million, that is to half their 1978 value. Egypt also has assumed that Arab deposits at the Central Bank, totalling $1.9 billion, may be withdrawn.

The document provides official confirmation for the first time that Arab bank deposits amounting to one billion dollars have already been recalled, though it did not say whether Egypt was either willing or able to repay them.

While there is widespread agreement that the Egyptian economy faces serious difficulties that may worsen in the next 12 months if no official action is taken, few economists in the west or those associated with the World Bank estimated that the Arab boycott would lead to such dire consequences in the short term. Even Mr Sadat was hopeful that the economic crisis would be met by the active assistance of friendly western countries. For instance, he had announced some months ago that he was launching a five-year $15 billion "Carter Plan" to assist Egypt's economic development, a figure that has now been increased by his government by $3.5 billion.

colossal loss

Egypt received nearly two billion dollars in all forms of aid during 1978, with the US providing about half. To demonstrate what Egypt is losing as a result of the cut-off in Arab aid, Cairo has also listed the amounts it has received since the 1973 war with Israel. These include $3.7 billion in direct aid from governments, concessionary project loans from various Arab funds to the tune of $725 million, a two billion dollars loan from the Gulf Organisation for the Development of Egypt, plus the two billion dollars deposited at the Central Bank.

Egypt has also stressed that the Gulf Organisation had previously agreed to re-lend to Egypt the interest and principal on the two billion dollars loan on a revolving basis. This would have provided Egypt an additional sum of $2.7 billion which is the amount of principal and interest of the loan. The decision by Saudi Arabia, Qatar and the United Arab Emirates to withdraw from the Arab

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Eastern Economist 30 Years Ago

JULY 22, 1949

Jute is a key item in India's export trade and it is one of our potential earners of foreign exchange. During 1948-49 exports of jute manufactures accounted for approximately 34 per cent of the total exports. At a time when the trade deficit is expanding a well-conceived policy of jute exports can help relieve the critical foreign exchange position in some measure. The trade is reported to have put sound and practicable suggestions to the Commerce Ministry for modifying the jute export policy with a view to maximising the soft currency earnings in a manner which will not affect dollar earnings prejudically. The main line on which modification of the current policy is suggested is to make substantial alterations in the system of quotas to the soft currency areas which operates as a clog and to liberalise exports on a wide scale. The trade, however, is far from pleading for the complete withdrawl of the quota system. This measure is not practicable in the context of some of our urgent import requirements. The urgency of purchasing food from certain surplus countries—situated mostly in the hard currency areas—overrides every other consideration. The commitments of jute exports quotas, which we have already accepted for food imports and also under the bilateral agreements, cannot be disturbed. In the case of these countries the quota system must of necessity be maintained. But elsewhere—and this extends over almost the whole soft currency areas—the policy of jute exports must be freed from the shackles of fixed quotas.

Organisation for Industrialisation and the budding arms industry in which the British and the US companies participate, would further cost Egypt the potential benefits of investments worth about $1.5 billion, according to the Egyptian government sources.

Britain's North Sea bonanza

THE UNITED Kingdom, which is producing from its North Sea fields oil to meet 85 per cent of its current domestic consumption and is expected to become self-sufficient in this respect by the second half of next year, has drawn up ambitious exploration and production plans for the early 1980s. The present 85 per cent self-sufficiency by the UK on the crude oil front, of course, has been achieved through exporting nearly 45 per cent of the light low-sulphur North Sea output and in exchange importing less expensive heavy crude oil.

The plans, which have been drawn up recently, envisage that oil production from the continental shelf of the country will be raised from the 70/80 million tonnes level, to be reached this year, to between 115 m. and 140 m. tonnes by 1982. The government is said to be rapidly reviewing the existing policies, including those for licensing new territories for exploration on the continental shelf, for the assignment of licences and for the role of the British National Oil Corporation. The aim is that conditions should be created in which all concerned can play their part in the development of the country's oil and natural gas resources.

The discovered oilfields in the continental shelf of the UK in the North Sea are estimated to contain between 2,400 m. and 4,400 m. tonnes of crude oil. Some 106 m. tonnes had been produced up to the end of 1978 since the first oilfield went into operation in 1975, leaving the reserves yet to be exploited between 2,300 m. and 4,300 m. tonnes. The commercial reserves, which may be discovered under the licences already issued, are expected to total between 350 m. and 800 m. tonnes. It is estimated that 550 m. to 1,000 m. tonnes may lie on the remainder of the continental shelf. But these include reserves in deep waters which are not technically exploitable at present.

Having already produced about 300 billion cubic metres of gas, the recoverable gas reserves of the area are put at between 700 b. and 2,000 b. cubic metres. All the fields now under contract to the British Gas Corporation, it is expected, can support an average production rate of 160 m. cubic metres a day by the early 1980s.

The North Sea oil resources of Britain have contributed significantly to putting its balance of payment position on a sounder footing during the past two years. Last year, the government received £ 520 million—£ 288 m. in royalties, £ 183 m. in petroleum revenue tax and £ 50 m. in corporation tax—from the North Sea oil resources, at an exploitation level of the value of £ 2,800 m. for oil and £ 2000 m. for gas. These receipts in 1977 aggregated to £ 240 m. An expenditure of £ 257 m. was incurred on oil exploration last year. The total capital investment in oil and gas production was of the order of £ 2,300 million—about 22 per cent of all industrial investments in the country. More than 150 offshore exploration, appraisal and development wells were drilled during the year.

Czech agriculture in 2000 AD

PRAGUE'S RESEARCH Institute for the Economy of Agriculture and Nutrition has drafted a series of long-term forecasts and prognosis of the development of Czechoslovak agriculture until the end of this century. In the next twenty years, the structure of Czechoslovak diet will be gradually changing in favour of meat, milk, vegetables and fruit, i.e. foods of the highest biological value. The daily energy supply is to drop (in view of the frequent so-called civilization diseases evoked or promoted by an excessive supply of calories) from 3,134 kcal, in 1976 to 2,980 kcal. in 2000.

The annual consumption of cereals is to be reduced from 108 kgs (in 1976) to 80 kgs (given in the value of flour plus rice in grain), potatoes from 96.5 kgs to 85 kgs and lard from 5.8 kgs to 4.5 kgs. The consumption of vegetables will increase from 71.2 kgs (in 1976) to 100 kgs and fruit from 46.1 kgs to 70 kgs. The annual meat consumption will rise from 81 kgs (in 1976) to 94 kgs.

structural changes

These planned changes are important and will have to be preceded by changes in the overall structure of crop and livestock production. Besides requirements for supplying the market with agricultural produce, the prognosis also points out the possibilities existing in agriculture which are determined primarily by the land stock. The acreage of land per head of the population, which is already small today, a mere 0.47 hectares (compared with 2.2 ha in the USSR, 2.09 ha in the USA, 0.63 ha in France, and 0.59 ha in Denmark), will be reduced to 0.40 ha by the year 2000. In 35 years (from 1965) the feeding capacity of land per head o the population will be reduced by 20 pe cent. This loss will have to be compensated for by intensified production.

By the end of this millennium, water wil be a decisive factor in Czechoslovakia, i many respects, both for the national economy in general and for agriculture i particular. Water consumption will increas thirteen-fold in large irrigation system and by 50 per cent in livestock production

In view of the growing consumption c animal proteins (meat, milk and eggs), i will be the main task in crop farming t grow sufficient quantities of good qualit forage for farm animals. In the yea 2000, livestock productivity is to reac the limits of the biological potential c animals which are known today. Whe this is achieved, the stocks of farm animals will no longer have to be increase and even lower cattle stocks than in 197 might be sufficient. Thirty per cent of th total cattle stock will be milch cows meat-milch breeds will continue, an meat breeds will be in minority. Mil production will be concentrated in low lands near large consumption centre The annual milk yield is to averag

3,600 to 4,500 litres. All this, naturally, requires the construction and expansion of facilities for cattle, pig and poultry breeding on a large scale.

FAO meet on rural poor

As MANY as 800 million people in the rural areas of developing countries are living in a state of poverty and misery. To highlight their living conditions and to evolve a programme of action integrating rural masses into development programmes, discussions have been held at Rome during the past few days at a conference to which all UN members were invited. At this gathering, presided over by the former Venezuelan head of state, Mr Rafael Caldera, farm organisations came for the first time to attend as official delegates.

The Food and Agriculture Organisation of the United Nations, which organised the conference, pointed out that food output has increased in most regions faster that the rise in population. But the differentials between the rural and the urban people and between the rich and the poor in the rural zones have been widening over the last few years. About 1,300 million people are not taking part in programmes for economic progress and have incomes lower than $200 a year.

The FAO felt that by the end of this century, the total rural population is likely to be around 2,896 million. The current output and demand trends indicate that the developing world will have a cereals deficit of more than 90 million tons in 1985, as against only 16 million tons in 1970.

Most people classed as hungry live in rural zones. In the period 1972-74, as many as 455 million people did not have a minimum energy supply judged as critical. More than 65 per cent of these lived in East Asia. The main causes of rural poverty stem from an inequitable distribution of land and water, laws on farm rents and share-cropping and difficulties in getting modern technology. At the national policy level, the rural sector comes off worse in the realm of public spending. In international trade, developing countries come up against tariff barriers that hamper domestic investment.

In the debate at the conference, there was overwhelming support for improving the lot of the rural poor in the Third World countries. Delegates stressed that economic development would become meaningless if the millions of rural poor, whose number was increasing every year, did not get adequate food, clothing, shelter, education and other facilities.

The conference considered ways to ease the plight of poor farmers, whose number was estimated at 1.3 billion with 700 million of them declared "destitute". Specifically, the delegates were debating a global strategy that would enable the rural poor to have easier access to land, water and credit and to participate in decision-making.

The US Ambassador to the UN, Mr Andrew Young, revived his idea of a "food corps" patterned after the peace corps, which he first proposed at a food conference in Rome two years ago. "Such voluntary programmes mobilise communities and a nation's youth in the development process, call on the best instincts of the human spirit and give life to the goal of self-reliance".

Muzorewa snubbed

THE RECENT visit of Zimbabwe-Rhodesian prime minister, Mr Abel Muzorewa, to Washington and London has not got him the promise of recognition by the USA and the UK. Though after his meeting with Mr Carter, Mr Muzorewa had declared that he had found a very positive attitude towards his mission, the US official spokesman made it clear that there was no change in the US policy towards Rhodesia.

The Carter administration feels that Mr Muzorewa's government preserves too much of the entrenched power of Zimbabwe-Rhodesia's white minority and does not adequately represent the black majority, nor give voice to the Patriotic Front that opposes the government. Mr Carter has insisted that further reforms must be effected before he would agree to end US participation in the embargo.

In London also, Mr Muzorewa emerged from talks with the British prime minister, Mrs Margaret Thatcher, saying that he had discerned "a definite determination" by her government to lift sanctions against his country, but he evidently left the UK empty-handed.

There is a feeling on the part of the present British government to see that sanctions end and recognition is effected, but the British Foreign Office would like to have some more nations to support the idea. The British Foreign Office stated that "consultations" on the issue would be held at the meeting of Commonwealth prime ministers in Lusaka (Zambia) and later with Mr Muzorewa.

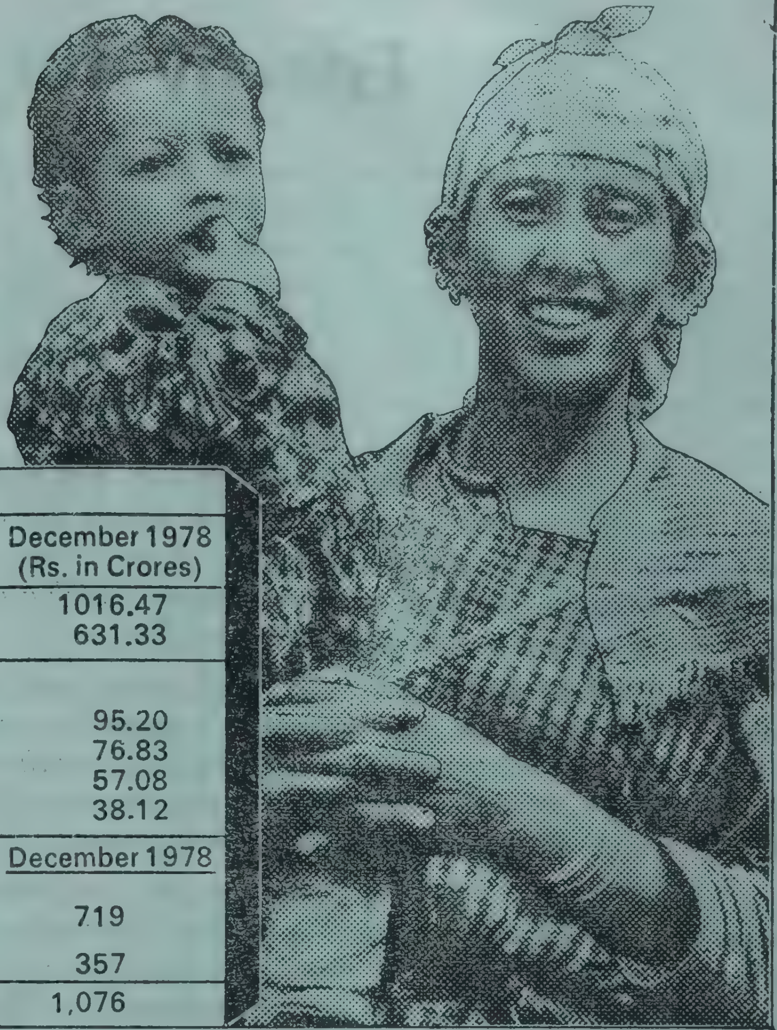
British support

The British Foreign Secretary, Lord Carrington, stated recently that the April elections in Zimbabwe have changed the situation fundamentally. Bishop Abel Muzorewa, he said, "needs our help and encouragement if he is to demonstrate that a new government with new policies is in control and that Rhodesia is now firmly embarked on the road to a multiracial society."

Elsewhere in Africa different views are held as to whether there has been a real transfer of power from the white minority to the black majority. For instance, the Organisation of African Unity (OAU) ministerial conference agreed recently to give direct "financial and material assistance" to Zambia, Angola and Mozambique to help them combat South Africa and Zimbabwe-Rhodesia. The OAU spokesman, Mr Peter Onu, told a news conference that the ministers agreed that the archives were too full of resolutions condemning the aggression and the time had come for concrete action.

The Soviet Union has pledged to increase material support for the intensification of liberation movement in Zimbabwe-Rhodesia. The Soviet Union has stressed that it would continue providing training facilities for guerillas fighting for the control of Zimbabwe-Rhodesia.

A REPORT TO THE NATION



Union Bank's Performance in 1978

HIGHLIGHTS

	December 1977 (Rs. in Crores)	December 1978 (Rs. in Crores)
DEPOSITS	860.30	1016.47
ADVANCES	523.30	631.33
ADVANCES TO PRIORITY SECTORS		
Agriculture	76.91	95.20
Small-Scale Industries	64.23	76.83
Exports	52.93	57.08
Others	32.92	38.12

	December 1977	December 1978
No. of Rural & Semi-Urban Branches	667	719
No. of Urban & Metropolitan Branches	333	357
TOTAL BRANCHES	1,000	1,076

STATEMENT OF POSITION (Rs. in Crores)

31.12.1977	LIABILITIES	31.12.1978
1.25	Capital	1.25
4.11	Reserves	4.71
860.30	Deposits	1016.47
49.70	Borrowings	40.83
15.81	Bills Payable	32.54
65.26	Bills for Collection	92.61
5.47	Other Liabilities	24.07
36.16	Acceptances, Endorsements, etc.	57.52

PROFIT AND LOSS ACCOUNT

1.56	Profit for the year	1.76
0.55	Less transferred to Reserve Fund	0.60
0.80	Less transferred to Contingencies	0.95

31.12.1977		31.12.1978
0.21	Balance transferred to Central Government	0.21
1038.27		1270.21

31.12.1977	ASSETS	31.12.1978
122.62	Cash	140.32
9.02	Balance with & Loans to other Banks	7.72
245.90	Investments	296.15
523.30	Advances	631.33
65.26	Bills Receivable	92.61
36.16	Acceptances, Endorsements, etc.	57.52
2.81	Premises	2.76
5.19	Safe Deposit Vault, Furniture, Fixtures, etc.	5.69
28.01	Other Assets	36.11
1038.27		1270.21

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Head Office: 239, Backbay Reclamation, Nariman Point, Bombay 400 021.

Interpub/UBI/1/79

Special feature

Energy for the masses

There indeed has been an all-round improvement in the overall agricultural production in the recent past. Yet the progress in three areas, namely, coarse grains, pulses and oilseeds has left much to be desired for. The output of coarse grains has tended to stagnate. But since the trends in the production of rice and wheat have been quite encouraging, this has not injected any complications. The case of pulses and oilseeds, however, is different. We have been importing during the last two years 600,000 to 800,000 tonnes of edible oils at a huge cost with a view to ensuring adequate supplies for the consumers at reasonable prices. Though some imports of pulses have also been effected, it has not been possible to augment their availability to such an extent as to impart stability to their prices. Large-scale imports of pulses, it has been found, are just not feasible.

To rectify the situation on the oilseeds and pulses fronts, the central government has drawn up specific action plans. The output of pulses is proposed to be raised this year to 13.5 million tonnes —approximately 1.5 million tonnes more than during the last year and half a million tonnes more than the record harvest in 1975-76—and 15.5 million tonnes by 1982-83. The production of oilseeds, which crossed the 10 million mark last year, is envisaged to be raised by a couple of million tonnes during the next four years.

It is rather unfortunate that both pulses and oilseeds, which are energy-rich products, are being produced currently under energy-starved conditions, primarily on marginal lands in rainfed areas. An important element of the strategy evolved to boost their production is to foster their cultivation in irrigated areas. Research efforts too are being strengthened: so also extension work. This piece throws light on the action programmes that have been drown up for raising the yields of the two energy-rich farm products.

Concerted efforts being made in the two fields should yield wholesome results in the very near future. Some dividends have already been derived last year, particularly in respect of oilseeds. Serious attempts at raising their production came to be made two years ago. The drive for improving the output of pulses was initiated last year. It has helped in raising this production though marginally. With an eminent agricultural scientist, Dr M.S. Swaminathan, as secretary in the ministry of Agriculture, the progress in the future can be expected to be faster.

EVEN THOUGH the impact of good rainfall and the cumulative effect of the measures initiated in the latter half of the 1960s to foster the green revolution in the country cannot be minimised, the record harvesting of several crops during the 1978-79 agricultural year, which ended on June 30, has been brought about by several steps taken during the last two years. Despite its failings in some other fields, Mr Morarji Desai's government, which quit this week because of large-scale desertions by its supporters, could take legitimate pride in it.

During the year just gone by, the total output of foodgrains scaled a new peak at 130.5 million tonnes—4.9 million tonnes higher than the previous record harvest in 1977-78 (125.6 million tonnes). The output of wheat grew last year to 34.7 million tonnes from 31.33 million tonnes in the previous year and that of rice to 53.79 million tonnes from 52.67 million tonnes. The latter performance would have been even more impressive had the repeated widespread floods in West Bengal and severe floods in Uttar Pradesh and Bihar not caused during the last kharif season as much damage as they did: conservative estimates put the loss of production due to this factor at over two million tonnes of rice.

The latest estimates of cotton and jute and mesta too speak of new peaks being accomplished. The production of cotton last year rose to around 7.8 million bales from 7.1 million bales in the previous year and that of jute and mesta (final estimates) to 8.29 million bales from about 7.15 million bales. The earlier record in the production of cotton was set in 1971-72 at 6.95 million bales and in respect of the output of jute and mesta in 1973-74 at 7.68 million bales. In the case of sugarcane, another major crop, the record output of 7.1 million tonnes (in terms of gur) was realised in 1977-78. Last year's crop has been only marginally lower.

The above data suggest that large-scale shortages on the agricultural front, which have been a recurring phenomenon, causing many distortions in the economy, by and large are a phenomenon of the past. Judicious supply management through building up buffer stocks in the years of above-normal harvests can obviate—or at least mitigate to a great extent—the shortages that might occassionally arise due to adverse weather conditions.

In fact, the heightened importance that is being accorded to the expansion of irrigation facilities, additions to the power generating capacity and for fostering the consumption of good seeds, fertilisers and pesticides (simultaneously, efforts are being made at raising their domestic output) should help in moderating the undulations and vicissitudes in our agricultural output.

The major factors contributing to the output of several agricultural commodities scaling new peaks last year have been a much larger increase in irrigation facilities and consumption of fertilisers. Better management practices and good seeds also have contributed not insignificantly. The additional irrigation potential created during the last two years has been of the order of over 5.1 million hectares—much above the potential created earlier since independence in any two years. The consumption of fertilisers, similarly, went up last year by about 0.9 million tonnes to approximately five million tonnes and that of pesticides improved considerably. The performance in the previous year too had been quite encouraging.

There are, however, three areas of our agricultural sector where the progress achieved during the last two years has not been commensurate with the growing needs. These are the raising of coarse cereals, pulses and oilseeds. In the case of oilseeds, there is stated to have been some increase in production last year (10.1 million tonnes) over the 1977-78 level of 9.459 million tonnes, but the record set at 10.4 million tonnes in 1975-76 could not be attained. The production of coarse grains has been estimated at 30 million tonnes. It showed a marginal improvement over the previous two years, but still fell short of the 1975-76 peak of 30.49 million tonnes. The case of pulses has been no different. Last year's production at 12.01 million tonnes showed an increase of nearly 300,000 tonnes over the previous year's figure, but was lower than the 1975-76 record of 13.04 million tonnes by as much as 1.03 million tonnes.

Whereas the prices of coarse grains have been held by the increased output of wheat and rice and the comfortable stocks built up of these two foodgrains in the recent years, initially through large-scale imports but subsequently owing to increases in domestic production and procurement, and those of oilseeds have been kept reasonably stable through large-scale imports, ranging between 600,000 and 800,000 tonnes during the last two years, it has not been possible to offset the impact of the decline in the production of pulses since 1975-76 on their

TABLE I

Growth of Indian Agricultural Production : 1950-51 to 1978-79

(Since the commencement of the planning era)

(In Million Units)

Group/Commodity	Unit	1950-51	1955-65	1960-61	1965-66	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978 79**
A **Foodgrains**	Tonnes	55.01	69.34	82.33	72.35	108.42	105.17	97.03	104.67	99.83	121.03	111.17	125.60	130.50
a. **Cereals**	,,	45.81	57.63	69.59	62.40	96.60	94.07	87,12	94.66	89.81	107.99	99.81	113.80	118.49
Rice	,,	22.06	28.65	34.60	30.59	42.23	43.07	39.25	44.05	39.58	48.74	41.92	52.67	53.79
Wheat	,,	6.82	8.87	11.00	10.39	23.83	26.41	24.74	21.78	24.10	28.85	29.01	31.33	34.70
Jowar	,,	6.25	6.74	9.90	7.58	8.10	7.72	6.97	9.10	10.41	9.50	10.52	11.82	
Maize	,,	2.36	3,14	4.12	4.82	7.49	5.10	6.39	5.80	5.56	7.26	6.36	5.95	30.00
Bajra	,,	2.68	3.46	3.29	3.75	8.03	5.32	3.93	7.52	3.27	5.74	5.85	4.71	
Other cereals	,,	5.65	6.77	6.69	5.27	6.93	6.46	5.84	6.41	6.88	7.91	6.13	7.32	
b. **Pulses :**		9.20	11.71	12.73	9.94	11.82	11.09	9.91	10.01	10.01	13.04	11.36	11.80	12.01
Of which :														
Gram	,,	3.82	5.42	6.26	4.22	5.20	5.08	4.54	4.10	4.01	5.88	5.42	5.45	NA
B. **Non-Foodgrains**														
a. Oilseeds* (Five Major)	,,	4.98	5.50	6.87	6.40	9.26	8.75	6.86	8.85	8.53	9.91	7.82	8.93	10.10£
Of which :														
Groundnut	,,	3.32	3.68	4.70	4.26	6.11	6.18	4.09	5.93	5.11	6.75	5.26	6.07	NA
Rapeseed and Mustard	,,	0.77	0.86	1.35	1.30	1.98	1.43	1.81	1.70	2.25	1.94	1.55	1.62	NA
b. Sugarcane (in terms of gur)	,,	7.05	7.43	11.41	12.77	12.98	11.63	12.76	14.43	14.72	14.41	15.85	18.78	NA
c. Cotton (Lint)	Bales@	3.04	4.22	5.55	4.76	4.76	6.95	5.74	6.31	7.16	5.95	5.84	7.10	7.80
d. Jute	Bales †	3.50	4.47	4.14	4.48	4.94	5.68	4.98	6.22	4.47	4.44	5.35	5.34	
e. Mesta	Bales †	0.66	1.15	1.11	1.30	1.26	1.15	1.1I	1.46	1.36	1.47	1.75	1.78	8.29

* Includes five major oilseeds viz, groundnut, rapeseed and mustard, sesamum, linseed and castorseed.

@Bale=170 Kgs. †Bale=180 Kgs. **Provisional estimates. NA=Not available. £Includes linseeds, castorseeds and nigerseeds.

prices as any large-scale imports of this protein-rich food are not just possible. Some small quantities of pulses have been imported from Syria, in west Asia, and a couple of African countries, but the gap between the requirements and the supplies estimated around two million tonnes, has not been bridged.

It must also be stressed that the outputs of these three crops have been showing significant fluctuations in the past and the bumper harvests in some years do not truly reflect the success of any particular measures taken in those years. Largely, they have been caused by favourable weather conditions as the crops are primarily rain-fed.

The compound growth rates of various crops in the country over the past 11 years, during which concerted efforts have been made by the central government at raising agricultural production, reveal the same story. The compound growth rate for total foodgrains during the period 1967-68 to 1978-79 has been around 2.6 per cent per annum. The highest growth rate among all foodgrains has been shown by wheat—6.4 per cent per annum. The growth rate for rice works out to 2.3 per cent a year. In the case of pulses, it has been only around 0.3 per cent and in respect of coarse grains around two per cent. Amongst the commercial crops, whereas the outputs of cotton and sugarcane have grown during this period at a compound rate of 2.8 per cent and 3.5 per cent per annum, respectively, that of the five major oilseeds, namely, groundnuts, rapeseeds and mustard, sesamum, linseeds and castorseeds, has been of the order of 1.8 per cent.

The ministry of Agriculture at the centre, while not being complescent about the need for continuing efforts at further raising the outputs of the foodgrains and commercial crops which have already shown encouraging trends, namely, wheat, rice, cotton, sugarcane and jute and mesta, with a view to meeting the growing requirements of the country not only in the short run but also in the long run, has directed its endeavours towards raising the yields particularly of pulses and oilseeds in which areas the position is considered to be rather disquieting. Heightened emphasis is also being put on enhancing the production and productivity of coarse grains; this is considered socially important from the point of view of the vulnerable sections of society.

Pulses and oilseeds are rain-fed crops. Though rich in energy—pulses in protein and oilseeds in fat—they unfortunately are being grown under energy-starved conditions.

TABLE II

Per Capita Net Availability of Pulses

Year	Availability of pulses (gram per capita per day)
1955	71.1
1960	65.5
1965	61.6
1970	51.9
1975	40.0
1976	50.8
1977	43.6
1978	44.4

Source : Directorate of Economics and Statistics

The central ministry of Agriculture has recently written to the state governments that they should use considerable untapped potential available for increasing the output of both kharif and rabi jowar, which is one of the most important coarse grains produced in the country, by using new high-yielding varieties that can match reduced duration of monsoons, have the capability of withstanding grain deterioration in the case of late rains and have a superior response to input use. Specific drives, however, have been initiated to boost the outputs of both pulses and oilseeds. These are the new thrusts in agriculture in the interest of balancing to some extent the production pattern as well as for mitigating undue pressures on the price-line emanating from the agrarian sector. The overall strategy to improve agronomic practices for dry land crops too will not only help in raising the yields of these two energy-rich crops but also of coarse grains which will go a long way in improving the conditions of cultivators in arid and semi-arid areas.

Although according to nutrition experts, our requirements of pulses currently should be 17 million tonnes, the production is just about 12 million tonnes. The wide gap between the optimum requirements and the supplies available obviously cannot be bridged in a year or two. The target for the current agricultural year (1979-80), therefore, has been set at 13.5 million tonnes, which is 1.4 million tonnes higher than the last year's output and about half a million tonnes more than the record production in 1975-76.

The strategy for boosting the production of pulses has been evolved after a careful analysis of the reasons for their low production and productivity. The reasons identified are as follows:

(i) Only about nine per cent of the area under pulses is irrigated, whereas 91 per cent is rain-fed.

(ii) Most of the pulse crops are either grown on marginal lands by small and marginal farmers or grown as catch crops depending on the residual moisture after the harvesting of main crops like wheat and paddy.

(iii) The use of inputs, particularly chemical nutrients, for pulse crops is very low.

(iv) Most of the pulses are susceptible to pests and diseases both at the time of early growth and maturity. Many of them are susceptible to weather aberrations like heavy rainfall, lightening and inadequacy or sunshine at certain stages.

(v) Unlike cereal crops, pulse crops have not yet had the advantage of new technology, leading to substantial increases in productivity and better returns to the growers.

(vi) The productivity of most of the crops is low and wherever irrigation facilities are introduced, the farmers previously sowing pulse crops shift to high-productivity low-risk crops like cereals.

(vii) Traditionally, the prices of pulses have been low and marketing arrangements for small quantities in the interior areas have been inadequate, leading to low returns to the growers.

Already several steps have been initiated since the last year to step up the production of pulses. These include: (i) fixation of support prices for various pulse crops; (ii) strengthening of research efforts; and (iii) adoption of a package programme.

Till 1977-78, the support price was fixed only for the gram crop. Last year this measure was extended to arhar and moong. Urad has been covered by the scheme this year. The support price for gram has been increased from Rs 95 per quintal. to Rs 140 per quintal. This year's support prices for arhar and moong are higher by Rs 10 per quintal compared to last year when they were Rs 155 and Rs 165 per quintal, respectively. The support price for urad has been fixed at Rs 175 per quintal (Table III).

As a sequel to the recommendations of a workshop organised recently, an action programme has been finalised for stepping up the production of pulses to 13.5 million tonnes this year and 15.5 million tonnes by 1982-83. The key elements of the action programme are:

(i) increasing irrigated area under pulses (gram, moong and arhar crops);

Increasing the production of pulse crops is not only essential for providing protein-rich food at reasonable cost both for human consumption and for farm cattle but also for overall productivity and conservation of Indian agriculture.

(ii) fostering production in the rainfed areas by raising productivity through the adoption of package approach; and

(iii) encouraging inter-cropping/mixed cropping of pulses with cereals, millets and oilseeds.

A multiple effort is envisaged to implement an impact-producing programme for the development of pulses. Research, extension and price support are to be mobilised simultaneously. Further, for each important pulse crop, specific strategies, programmes and targets have been laid down separately for irrigated and unirrigated areas.

TABLE III

Support Prices of Different Pulse Crops

(Rs per quintal)

Pulse crop	1976-77	1977-78	1978-79	1979-80
Gram	95.00	125.00	140.00	—
Arhar	—	—	155.00	165.00
Moong	—	—	165.00	175.00
Urad	—	—	—	170.00

The directorate of pulses research has been established at the IARI Regional Station, Kanpur. During the sixth Plan, additional centres are proposed to be established at Rahauri (Maharashtra) for gram, pigeon-pea and rajmash; in the Bundelkhand region (Uttar Pradesh) for gram and arhar, and at Jobner (Madhya Pradesh) for moth. In addition, three national research centres—one each for gram, arhar and moong-urad—are being set up in Madhya Pradesh, Maharashtra and Tamil Nadu, respectively. Besides, the research on pulses is in progress under the All-India Coordinated Research Project at 17 centres covering the northern, eastern and southern states.

Sixteen new research centres are being established in major command areas of the country to work out the pulses cropping systems suitable for irrigated farming. The research findings for increased production of pulses under irrigated conditions will be disseminated through these centres. The extension education programme has further been strengthened by establishing 30 extension education centres in dry farming areas and their functioning is linked with the All-India Coordinated Research Project for Dryland Farming,

Radio, television and other suitable multi-media approach are to be utilised for regular dissemination of relevant information on pulses. Pamphlets, leaflets, etc, will also be brought out from time to time to provide the latest information to the extension workers. Farm exhibitions at various levels would be organised to highlight the importance of pulses. Krishi Pundit Awards will be given to honour farmers who achieve the maximum yields in pulses. Farmers' training programme will now be taken up extensively to those areas which are important from pulses production point of view. In areas where TV system is being operated, the research findings on pulses will be imparted to the village level workers through the subject matter specialists for onward transmission to the farmers.

Strategy has also been worked out for the important individual pulse crops. In the case of arhar (irrigated crop), the approach will be to increase the area by 300,000 hectares under irrigated conditions. This crop requires pre-sowing irrigation. Water will be made available to farmers from the middle of May to June for undertaking sowing operations. The subsequent irrigation may be required in September, October and December. The cultivation of arhar is possible only in those command areas where facilities exist to irrigate the crop through field channels. There is a possibility of changing the cropping pattern 'maize-wheat' to 'arhar-wheat' in the states of Punjab, Haryana and western parts of Uttar Pradesh. Short duration varieties (150-160 days) T-21 and UPAS-120 can be grown extensively in such areas. This can also be achieved under tubewell irrigation by assuring marketing of the arhar produced through institutions.

Change is envisaged in the time of sowing of arhar in some areas of Bihar where sowing in September results in higher yield.

The approach in the case of the unirrigated crop of arhar will be to increase productivity by the application of phosphatic fertiliser (50 kgs per hectare). The area under this crop is to be raised through cultivation as inter/mixed crop by increasing the number of rows of the crop. The states of Maharashtra, Uttar Pradesh, Madhya Pradesh, Gujarat and Karnataka are envisaged to adopt this practice extensively.

As regards the gram crop, pre-sowing irrigation is essential to undertake sowing in the last week of September and the beginning of October in command areas and other canal irrigated areas. This practice will increase the area under gram

Water during these months is of crucial importance for increasing gram output in Rajasthan, Uttar Pradesh and Madhya Pradesh and also inc ertain areas irrigated by canals in Punjab and Haryana. The cultivation of wheat, a competing crop, in such areas where water is not adequate to meet its requirements is to be discouraged. Efforts are to be made to divert such areas to gram. The expected increase in area would be about 300,000 hectares.

In the rainfed areas, the adoption of recommended package of practices like application of phosphatic fertiliser is expected to help in increasing the productivity of gram. The crop is generally grown as rainfed in the states of Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar, Maharashtra and Haryana.

TABLE IV

Group-wise Break-up of Pulses Targets

(Production in lakh tonnes)

Crop	Base level production	Targets for	
		1979-80	1982-83
Gram	55.90	63.60	71.40
Arhar	18.90	21.40	25.00
Urad	7.00	8.00	9.00
Moong	7.90	11.40	18.40
Lentil	4.50	4.80	5.40
Others	25.20	25.80	25.80
Total	120.20	135.00	155.00

The gram crop is generally damaged by pod borer. Control measures for pod borer will be adopted on community basis, both under irrigated and rainfed conditions.

Irrigated cultivation of summer moong can successfully be taken up over an area of 1.7 million hectares in the states of Uttar Pradesh (one million), Bihar (0.4 million), Haryana and Rajasthan (0.3 million) after the harvesting of wheat, potatoes, sugarcane and mustard and before the sowing of kharif crops. The availability of water is scarce in the canals during these months, but still it is cultivated in some parts of wastern UP. Tubewell irrigation, though costly, is possible. On each tubewell, farmers can grow moong in about one hectare. There are 614,000 tubewells in UP, 124,000 in Bihar, 11,000 in Rajasthan and 186,000 in Haryana.

An area of 1.7 million hectares unirrigated is under kharif moong. The productivity in this area can be increased with the application of phosphatic fertilisers.

At present, 800,000 hectares are under rabi moong/urad being grown in the states of Orissa and West Bengal and the southern states. This can be increased by another 800,000 hectares in rice fallows on residual moisture or under-irrigated conditions in the southern states.

Some modifications have also been suggested and are expected to be made in the near future in the policy framework. As the availability of improved seeds for various pulses is not sufficient, the National Seeds Corporation might be provided a subsidy to angment the supply of seeds. So far as irrigation is concerned, the scheme for release of water from canals may be revised in the command areas. Some remission on water rates and electricity charges may also be necessary.

Another important step being considered is the harvesting of rain water during the rainy season by constructing small farm ponds so that one protective watering can be ensured at the critical stage of the growing of the crop in September-October. Efforts are also being made to make available credit for the cultivation of pulses as the small and marginal farmers, who generally grow pulses, do not have resources for investment.

Based on the above strategy, it is considered possible to achieve the productivity of various pulse crops under different situations as indicated in Table V.

As regards oilseeds, the main causes for their low production and inadequate growth rates are said to be as follows:

(i) Like pulses, oilseeds are energy-rich crops but are cultivated largely under conditions of energy starvation.

(ii) Only about eight per cent of the area under oilseeds is irrigated.

(iii) Plant population is mostly poor due to the use of seeds of poor quality and wide phasing.

(iv) Pests and weeds, etc, cause great deal of losses of both in the early stages of plant growth as well as at the stage of maturity.

(v) Absence of rains at the critical stage before maturity also causes significant losses in yields.

(vi) Poor post-harvest technology, including deficiencies in marketing, price support, storage and processing arrangements, etc, too have adverse effect on returns to growers and incentives for production.

Several steps have already been taken to increase the production of oilseeds. They include:

(1) Strengthening of oilseeds research and extension training:

(i) The Indian Council of Agricultural Research has established 45 centres of research in different parts of the country dealing with different oilseed crops under the aegis of an All-India Coordinated Oilseeds Research Project. During the current Plan, with a view to overcoming the priority gaps in terms of scientific manpower and additional working expenses, some of the centres have been strengthened. Some new centres are proposed to be established in areas which have not been covered so far.

TABLE V

Expected Yield Level of Pulse Crops

Crop	Productivity (kgs/ha)	
	Irrigated package	Unirrigated package
Gram	1,500	1,000
Arhar	1,400	1,000
Moong	600	—
Urad	500	—
Lentil	—	800
Others	—	—

Increase in the production of pulse crops could be achieved in two ways. One is by raising productivity per unit area/time. Another by fitting them in the nitches of the existing and new cropping systems.

(ii) With a view to intensifying research on breeding of groundnut varieties, a separate national research centre for groundnut has been sanctioned during the current plan to be established at Junagadh. This centre will lay emphasis on basic research directed at increasing the yield potential of groundnut.

(iii) With the assistance from the International Development Research Centre of Canada and also under the aegis of Indo-Swedish collaboration, research on rapeseed and mustard, sesamum and sunflower have been strengthened.

(iv) With a view to working out the oilseed cropping systems suitable to command area programme, 16 research centres have been recently sanctioned. These centres have been linked up with the Krishi Vigyan Kendras so that the new technologies can be simultaneously disseminated through appropriate extension education programme.

(v) With a view to harnessing the available new technology for increasing the production of oilseeds in dry-land areas, 30 extension-cum-educational centres linked with the All-India Coordinated Research Project for Dry Land Farming have been sanctioned.

(vi) Oilseeds production will be a major focus of training, farm communication and dissemination of farm information at all levels. The Directorate of Extension will undertake specific training programmes in this major area.

(vii) Radio, television and other suitable multi-media approach will be utilised for regular dissemination of relevant information of oilseeds. Special bulletins and pamphlets will also be brought out.

(viii) Farmers exchange programme within the country will now be undertaken in those areas which are important for oilseeds production. Farm exhibitions at various levels would be organised to highlight the importance of oilseeds. Krishi Pandit awards will be instituted to honour farmers who achieve the maximum yields in oilseeds.

(2) Development efforts: The major thrust of development efforts, both through the centrally-sponsored and state sector schemes, for increasing the production of oilseeds has been on the following lines:

(i) Raising of productivity by adoption of the package approach on an area basis in respect of groundnut, rape-mustard, sesamum, safflower, linseed and castor in selected districts spread over fifteen states. An intensive oilseeds development programme was accordingly implemented. The measures for obtaining higher yields per hectare are use of pure seeds of improved varieties, proper tillage and seed treatment to ensure optimum plant population, use of bacterial inoculum for nitrogen fixation in the case of groundnuts, application of balanced dose of fertilisers including micro-nutrients, foliar application of fertilisers for enhancing the efficacy of fertilisers applied, adoption of plant protection measures on prophylactic and curative basis and also on community basis, and improved agricultural practices with particular reference to inter-culture, weed-control, crop sanitation and proper method of irrigation.

(ii) Extension of oilseeds cultivation to new irrigated areas in Andhra Pradesh, Karnataka, Rajasthan and Orissa. The crops covered under this scheme are groundnut in the first two states and both groundnut and rape-mustard in Orissa and Rajasthan.

(iii) Development of non-traditional oilseeds :

(a) Sunflower in eight states, viz., Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Tamil Nadu, Uttar Pradesh and West Bengal.

(b) Soyabean in four states, viz., Madhya Pradesh, Uttar Pradesh, Karnataka and Bihar.

Under these schemes provision exists for :

(i) Necessary facilities by way of financial assistance for the production of nucleus and foundation seeds as also for covering part of the expenditure on transport and handling of good quality/certified seeds.

(ii) Minikits containing seeds of new oilseed crops or new varieties of oilseeds, recommended for the selected districts, along with seed dressers and literature on package of practices, supplied free of cost to the farmers.

(iii) Financial assistance for organising plant protection measures as also for subsidised supply of plant protection equipment to the farmers.

(iv) Financial assistance for laying out problem-oriented demonstrations and also demonstrations to popularise improved techniques of cultivation.

(v) Provision of staff to implement the programme.

(3) **Integration of production, marketing and processing** : The techniques of cooperative organisation and marketing would be applied to the vegetable oils sector to achieve vertical integration of production, marketing and processing and thus help the farmer to adopt production techniques which will decrease the vulnerability of oilseed crops to climatic variations while raising yields and offering year to year price stability. A project to be implemented by the National Dairy Development Board, which has been cleared recently, envisages importation of 160,000 tonnes of gift edible oil from the cooperative league of the USA to generate funds required for the development of cooperative structure, increasing oilseeds production and increasing returns to farmers through better processing and marketing.

(4) **Price Support**: To provide suitable economic incentive to the growers, the government has been announcing support prices for groundnut, rapeseed-mustard, soyabean and sunflower seeds. The price support scheme now covers over 75 per cent of the total production of oilseeds crops of the country. The support prices per quintal of different oilseeds during the past three years have been given in Table VI.

TABLE VI

Support Price for Oilseeds

(Rs per quintal)

Oilseed crop	Support price for marketing season		
	1960-77	1977-78	1978-79
(i) Groundnut	140.00	160.00	175.00
(ii) Soyabean	Not fixed	145.00	175.00
(iii) Sunflower	150.00	165.00	175.00
(iv) Rape-mustard	—	—	225.00

For the crop year 1979-80, the minimum support price for rapeseed and mustard has been fixed at Rs 245 per quintal, the support price for groundnut has been raised to Rs 190 per quintal. The support prices for soyabean and sunflower seeds have been maintained at the last year's levels.

The national seminar on raising the production of pulses and oilseeds during the current financial year and the subsequent years, held recently, has recommended the following action programme for the oilseeds sector:

(i) **Introduction of improved technology**: The technology to be introduced should be the best available on the basis of the research work done in the area and should be specific to irrigated and unirrigated conditions as well as for pure crops and inter-crops. There is considerable scope for the introduction of short duration varieties of oilseeds in the irrigated farming systems without disturbing the major crop of the area. Also in rain-fed areas many inter-crop patterns of oilseeds with other crops are both profitable and beneficial from the point of soil fertility improvement. The technology would be introduced in each block and in each command area by incorporating the data available with the agricultural universities, All-India Coordinated Research Projects of the ICAR and state departments of agriculture.

(ii) Package of services :

(a) **Seeds**: The seed production base would be strengthened and the available seed resources would have to be mobilised and distributed to farmers in irrigated areas as well as in rainfed areas. In each command area, a suitable seed village may be developed for processing good quality seed. The National Seeds Corporation and the state seed corporations would strengthen their seed production porgrammes in oilseeds. Suitable subsidies may be provided by the centre for the multiplication of seeds of improved varieties of oilseeds.

(b) Plant protection: The plant protection canopy would be widened to cover larger area than hitherto and also as large a segment of the farming community as possible. Suitable subsidies may be built into the plant protection schemes to enable the small and marginal farmers also to take advantage of plant protection cover. The state agro-industries corporations or other suitable agencies may be developed as a service agency for pest proofing of entire villages.

(c) Irrigation: It should be the endeavour to provide one or two irrigations to oilseed crops in areas where no irrigation was given before. In order to maximise the benefits from the investment in major irrigation, the command area authorities would promote the introduction of oilseed crops in the cropping systems by introducing more efficient methods of water distribution and crop planning. In semi-arid areas water harvesting would be done both on individual and community basis. The on-going programmes of water harvesting in rainfed areas would be further strengthened.

(d) Credit: Credit is a key input for enabling small and marginal farmers to purchase other necessary inputs. In all command areas and other places credit seminars or fairs may be organised to enable farmers to get loans without much difficulty. These fairs may be in the nature of integrated credit and input supply fairs for the specific purpose of promoting the cultivation of pulses and oilseeds.

Assured marketing at a remunerative price is the greatest incentive to farmers for taking to any production programme other than those indicated strictly to meet thier own needs. Therefore, every effort should be made to purchase the surplus produce at prices not lower than the support price fixed by the government. The rural storage scheme proposed to be initiated may be utilised for insulating small and marginal farmers from losses due to their having to part with their produce immediately after harvest at a low price.

TABLE VII

Area, Production and Yield of Oilseed Crops in India: 1977-78

Crop	Area (lakh hec)	Production (lakh tonnes)	Yield (kg/hec)
A. Edible			
1. Groundnut	71.75	60.68	846
2. Rapeseed and Mustard	35.34	16.18	458
3. Sesamum	23.05	4.86	211
4. Sunflower	7.01	1.86	266
5. Niger	5.90	1.40	237
Total	143.05	84.98	
B. Non-edible			
1. Linseed	19.51	5.03	258
2. Castor	5.40	2.56	464
Total	24.91	7.59	

Specific programmes are being thought of for the various oilseeds crops. The production of groundnut, it is felt, has to be increased from the present level of about six million tonnes to nearly 7.2 million tonnes during the next four years. The increase is to be secured as follows: (i) unirrigated area (6.5 million hectares at 800 kgs/hectares) — 5.2 million tonnes; (ii) irrigated area (one million hectares at two tonnes per hectare) —2 million tonnes. Gujarat is envisaged to contribute 2.1 million tonnes annually. The contributions of Andhra Pradesh, Tamil Nadu and Karnataka are to be 1.4, 1.2 and 1.1 million tonnes, respectively.

The maximum scope for extending the irrigated area under groundnut exists as a summer crop in the command area of irrigation projects in the southern states such as Nagarjunasagar, Pochampad, Tungabhadra, Bhadra, Ghataprabha, Malaprabha and Hirakud delta irrigation projects. There are also possibilities of raising kharif irrigated groundnut in Nalgonda district under the Nagarjunasagar project because of the low average rainfall of about 600 mm.

The production of mustard, it is stressed, should be stabilised at least at 2.4 million tonnes a year. The major contribution in this field will have to be from Uttar Pradesh — at around 1.6 million tonnes.

The Hirakud project in Orissa, the Rajasthan Canal in Rajasthan and the Chambal Project in Madhya Pradesh offer good scope for increasing the area of irrigated mustard.

The output of sesamum, it is pointed out, can be raised through the use of improved seeds and fertilisers and pest control measures significantly in the coastal districts of Andhra Pradesh and Tamil Nadu. There is also good scope for extending its cultivation to the black as well as red soil virginia tobacco areas in Guntur and Krishna districts and the late rabi sorghum areas of Nellore district of Andhra Pradesh which usually remain fallow during kharif. The quality of tobacco grown after sesamum has been found to be better, fetching a higher price. Similarly, in the areas served by Nagarjunasagar project, there is a possibility of introduction of sesamum before cotton provided the release of water takes place by the June.

Safflower yields a high quality edible oil and the crop is drought-resistant besides being salt tolerant. Maharashtra accounts for 65 per cent of total area and 80 per cent of total production of safflower in the country. The national average yield is about three quintals per hectare as the crop is largely grown as a mixed crop. There is good scope for increasing the production of this crop as it is responsive to better management practices such as application of nitrogenous fertilisers and one or two protective irrigations.

As regards safflower, there is good scope for increasing the area under this crop in pure stands in Vidharba and Marathwada regions of Maharashtra. In Vidharbha, safflower can be a good substitute for low-yielding corriander.

In Madhya Pradesh, substantial increase in safflower area can be achieved by its introduction in the Malwa region and extension of area in Seoni-Chindwara and Khargone regions. Introduction of safflower in the Indore division following soyabean and as a replacement for uneconomic wheat crop under rain-fed conditions can also be tried.

Andhra Pradesh can expand safflower area by 25,000 hectares in the districts of Kurnool, Anantapur, Medak and Mehboobnagar. Karnataka also has potentialities for area expansion by about 25,000 hectares both in pure stands and as an inter-crop in wheat.

Soyabean cultivation has made rapid strides in the country during the last two years because of the availability of the black-seeded variety which can stand both drought and excess moisture, intensive extension efforts and price and market support. Madhya Pradesh offers the largest scope for soyabean cultivation followed by Uttar Pradesh. The potential for the crop in Madhya Pradesh is estimated at 700,000 hectares which could be developed without displacing any other crop by utilising the Kharif fallows. During 1978-79 the area under the crop is estimated at 2.2 lakh hectares. Madhya Pradesh has planned on increasing soyabean area in no less than 300,000 hectares during 1979-80. The potential in Uttar Pradesh for soyabean crop is around 200,000 hectares of which they have achieved about 60,000 hectares during 1978-79. In Uttar Pradesh, soyabean may replace low economy crops such as maize and finger millets. With intensive extension efforts on the part of the state government, it should be possible to reach a target of 700,000 hectares and 200,000 hectares in Madhya Pradesh and Uttar Pradesh, respectively, during the next three or four years.

There is scope for raising soyabean under the Chambal Command Area in Rajasthan to the extent of 10,000 hectares and under the Varna project in Madhya Pradesh to the extent of 20,000 hectares.

The development of sunflower crop can be concentrated in the states of Tamil Nadu, Karnataka, Andhra Pradesh and Maharashtra. Potentialities for extension of area under the crop exist to a small extent during the zaid season in Uttar Pradesh. The coverage target for sunflower by 1982-83 is placed at 700,000 hectares. Emphasis would be laid on increasing the area under sunflower as a mixed and cash crop. Groundnut-sunflower and rabi sunflower mixtures, which have been found to be profitable to the cultivators, will be extended. For mixed cropping and as a catch crop a short duration variety of sunflower (80-85 days) with low height and non-branching habit holds out good possibilities. A couple of varieties possessing these characteristics are now being evaluated at the national level for supply to the farmers.

With a view to encouraging irrigation of pulse and oilseed crops through minor works, the provision of subsidy on minor irrigation has been extended from two hectares to four hectares. Individual rain water harvesting is also being encouraged.

In the interest of better management of the pulses and oilseeds sectors, greater resort to buffer stocking is envisaged, besides, as mentioned earlier, encouraging of the growing of these crops even in non-traditional areas.

Another important step envisaged to be taken in the overall interest of agricultural development is the construction of storage facilities on an ambitious scale throughout the country so that agriculturists can feel confident that if they produce more, the government through the price support mechanism will ensure marketability at reasonable prices.

A new dimension has also been imparted to the programme of disaster preparedness against natural calamities. This consists of adopting such cropping patterns and crop varieties as would either avoid periods of heavy floods or drought, particularly for sowing, critical times of growth and harvesting. Attempts are being made to introduce short duration high-yielding varieties of cereals, pulses and oilseeds over the cropping seasons in such a way that droughts and floods have minimal effect on them. A flexible cropping pattern and contingency crop planning, which includes compensatory cropping programmes, are being fostered.

UNCTAD unrealism

New York

Sudhir Sen

In most cases the decision reached at the recent UNCTAD Conference held at Manila was not to take any decision. The conference discussed such important subjects as world shipping and the LDCs' share, technology transfer and 'brain drain,' without any breakthrough in sight. Considering the hardship that the developing countries faced with the ever-rising oil prices, the author asked the Secretary General of UNCTAD in an informal talk on June 20 if the question of supplying oil at concessional prices to the poor nations had ever featured in the talks. The reply was in the negative. This single fact, the author says, speaks volumes about the futility of the UNCTAD approach.

'UNDER NO circumstances take any decision"—this is how some wit has broken down UNCTAD, the weird acronym for the cumbersome organisation title: "United Nations Conference on Trade and Development". The wit had an important substantive point. If the UN bodies in general are distinguished for their endless debates and paucity of results, UNCTAD has outperformed the rest in both respects. Ever since it was established fifteen years ago, deadlocks and stalemates have remained its unfailing hallmark.

With its quadrennial assemblies (UNCTAD-V was held after a 3-year interval) rotating among the continents, it resembles a peripatetic arena for staging a North-South duel, trading charges about the world trade and with views clashing on a broad front generating much more heat than light. It has broadened down from conference to conference with an expanding inventory of unresolved issues. Its bureaucratic apparatus has registered impressive growth over the years, while its actual impact on the Third World's economic growth has remained minimal.

All this was inevitable, and predictable. For, from the day it was born, UNCTAD has addressed the right issues the wrong way. It has clamoured for enlarged aid, forgetting that the rich do not readily part with their fortune, that there is "no free lunch" even within a nation, far less between nations. It has demanded a larger share of the world trade for poor nations, again ignoring the fact that the textbook principles of free, or freer, trade cut little ice in a cold mercantalist world, that such enlargement of share is a function not of charity or goodwill, but of competition on the world market, supplemented by ingenuity and bargaining clout.

It has predicated national development primarily on the supply of the foreign exchange and has thereby made it a hostage to the generosity of spirit to be deployed by yesterday's unregenerated colonial masters. And in the process it has consistently ignored how much the developing nations can help themselves here and now—both individually and collectively—through their own efforts and with their own resources; how, with such an approach, they can vastly accelerate their domestic growth and expand their internal trade, and then use these as the launching pad for a fight on the world market with much better prospects of success; why, in short, by far the most promising route for them to travel, at least in the circumstances prevailing in today's world, is from internal development to external trade, and not the other way round.

UNCTAD ironies

The UNCTAD ironies do not end here. Indeed, they are reinforced by others that are even less flattering for the developing countries. The so-called "Group of 77" (their actual number has grown to 177) has been denouncing the rich nations for exploiting the world's poor. But it has turned a blind eye to the fact that within each developing country a small rich elite continues to exploit the masses of people; that this has made a mockery of the moral indignation it has been venting against the industrial nations.

More recently, the Group has been fighting for an ambitious plan to stabilise commodity prices at more equitable levels. The practical difficulties involved in carrying through such a plan on a global basis are formidable and, in most cases, may prove insuperable even if the requisite funds were available. But the most curious aspect about the plan is that, while so much effort is being made to secure a fair price for primary producers on the world market, so little is being done to guarantee a fair return—not to speak of an incentive price—to the millions of farmers who produce food for domestic consumption. This is all the more anomalous in view of the compelling need for food in the developing countries to feed their soaring population, the vast potential that lies untapped in most cases, the tremendous boost that increased food production would give to their GNP, their job opportunities and the living standards of the masses of their people, which under proper planning, could be accomplished with little or no foreign exchange. UNCTAD is thus throwing away the trump card of the developing nations and is chasing a will-o'-the-wisp across the planet.

unedifying implications

The implications of the UNCTAD folly, which is shared by several other UN bodies, are as tragic as they are unedifying. The LDCs are running after the rich nations wallowing in their "fat-dripping prosperity", begging for a few billion dollars to help promote their development, only to be rebuffed time and again with a few miserable crumbs reluctantly thrown at them. And meanwhile they are themselves losing tens of billions of dollars every year because of their continued failure to cash in on their enormous, unused and underused resources—their soils and waters, their profuse sunshine, and the billions of idle man-hours that are wantonly running to waste. To put these resources systematically to work must be their foremost task. Now that they are politically masters in their own house, they can do so without depending on outside help. What they, desperately, need is operation bootstrap, not external crutches.

The crowning anomaly of UNCTAD is what has happened within the so-called "Group of 77". When its 13 oil-rich members comprising the Organization of Petroleum Exporting Countries (OPEC), overnight quadrupled the oil price in December 1973, they made no distinction between rich and poor nations. While preaching the gospel of Third World solidarity they unabashedly extorted the bloated price in full from their non-oil brethren, thereby dealing a deadly blow to their development just when it was about to go into high gear.

The non-oil members of the group stoically suffered this blow partly out of fear that otherwise their own oil supply might be interrupted, partly to get back, as loan or grant, a tiny fraction of the petrodollars they were now shelling out to OPEC, but largely in the false hope that Third World solidarity, if kept intact, would be rewarded sooner or later, with higher prices for other commodities they sell on the world market. In short, they acted on the assumption that a bird in the bush was worth four in hand! The OPEC action is the worst blackmail history has on record, unparalleled even in the two centuries of colonial exploitation.

In an informal talk just given (June 20) at the New York chapter of the Society for International Development, UNCTAD Secretary-General Gamani Corea reviewed at some length the performance—or rather the non-performance — of UNCTAD-V. Despite his able presentation and a strenuous attempt to put the best possible face on the conference, he was all along on the defensive. The plethora of resolutions passed could barely hide the exiguity of the results it achieved.

futility of approach

At the end of the talk I asked Mr Corea if the question of supplying OPEC oil at concessional rates to the non-oil poor nations was at all considered in Manila, especially since the oil price is rocketing once again. His reply was 'no'. Only Iraq, he added, offered to do so provided similar concessions were made by the developed nations. Iraq's offer was made in its official statement, and that is where it ended. This single fact speaks volumes about the futility of UNCTAD's approach.

And it also undercuts the agency's case at its most critical point. If OPEC can run away with an exorbitant price for its product with the active support of those very poor nations who are victimised by it, how can one expect the rich nations to accommodate their plea for better and more stable prices for their primary commodities ? By its failure to restrain OPEC in the interest of the non-oil poor nations, the agency has in effect thrown away whatever moral case it had to seek better terms of trade from the industrial nations.

Carlos P. Romulo, Foreign minister of the Philippines, who presided over the conference in Manila, stated in his closing remarks; "There have been no victories in UNCTAD-V, and there have been no defeats. We have not been fighting each other here. We have been seeking to agree, even if in some cases we have only agreed to disagree". This pretty well sums up what happened in Manila. The conference went nowhere It was another case of stalemate.

agree to disagree

The agreement to disagree was particularly noticeable on all major issues The item to which the UNCTAD secretariat attached special significance was "Evaluation of world trade and economi situation, and measures for structura change". But the developed countries preoccupied with their domestic economi problems—inflation, energy crisis, and th prospects of a slowdown, if not of recession—were in no mood to embark o substantive discussions of such a far reaching item that aimed, in one form o another, to transfer more wealth an economic power to the world's poo nations. The views and attitudes of th parties differed so widely that no common ground could be found even to draf a resolution. The conference therefor decided to send the item to the Trade an Development Board, UNCTAD's executive body, for further consideration.

Virtually the same fate befell the iter on "protectionism and structural adjus ment". The conference urged develope countries to assist the developing natio and called on them "to move towards t reduction and elimination of quantitati restrictions and measures having simil effect." The decision reached was th work should be continued, in both GAT and UNCTAD, in the areas of tra estrictions, along with compilation of an nventory of non-tariff barriers.

On the Integrated Programme for Comodities, UNCTAD has drastically lowred its sights from the goals that were stablised by UNCTAD-IV in Nairobi n 1976. Even then progress is being made t a glacial pace. For example, to date nly $61million (end of June figure is bout $125 million) has been pledged owards a target of $280 million in voluntary contributions to the "second window" intended to finance such activities as commodity research and development, while the "first window", target at $400 million, will be used to finance buffer stocks of certain commodities as part of a price stabilisation scheme.

As for the LDCs' exports of manufactures and semi-manufactures, it was agreed that the UN Conference on Restrictive Business Practices should be held during the last quarter of this year to discuss the question of removing such practices.

On monetary and financial matters, the UNCTAD proposals made no headway. The United States left no doubt that it preferred to keep these matters entirely within the ambit of the International Monetary Fund.

transfer of resources

On "transfer of resources", that hardy perennial that crops up every now and then at UN-sponsored conferences, no fresh ground was broken. The developed countries were contributing only 0.3 per cent of their combined gross national product against an internationally agreed target of 0.7 per cent. They were urged to step up their contributions to meet the target, also to improve the quality of the Official Development Assistance (ODA), for example, by making it available as grants or with a higher rate of "concessionality." Hitherto such appeals have mostly fallen on deaf ears, nor is there any reason to think that the outcome will be any different this time. As on previous occasions, the United States reiterated that it had never accepted the idea of 0.7 per cent of GNP as the target for its development assistance, nor had it any intention of doing so now.

Apart from the oil issue and the OPEC and non-OPEC division in the Group of 77, other questions have begun to split their ranks, perhaps inevitably so since their development has been proceeding at different rates and, in several instances, also along different routes. For example, a resolution urging the industrial nations to cancel or suspend the LDCs' debts was quietly shelved because it found no support among countries like Brazil, South Korea and Singapore. They were reluctant to go beyond the relief already extended to the 15 poorest LDCs by the USA, Sweden, Canada and a few other nations in the form of debt cancellation, out of fear that across-the-board write-off of debts might hurt their own creditworthiness with prospective international lenders in whose eyes they might appear to be poor credit risks.

grandiose scheme

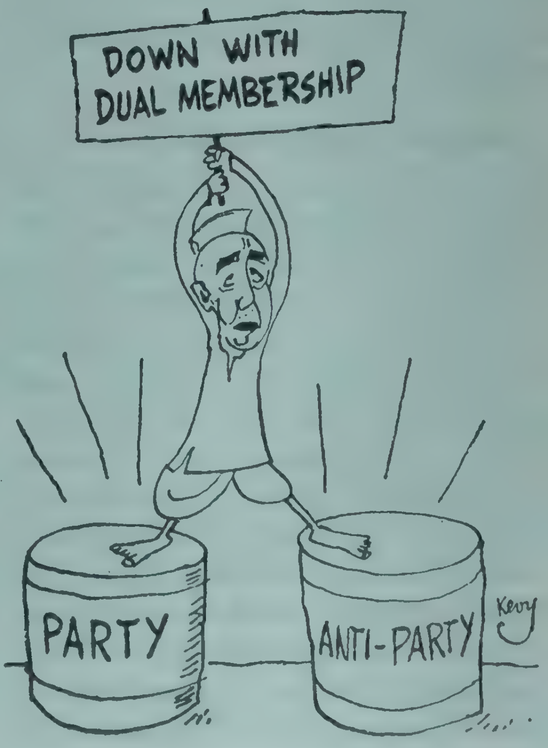
Even on the integrated commodity fund, UNCTAD's pet project par excellence, some commodity-producing LDCs are now harbouring serious second thoughts. Such a grandiose price stabilisation scheme, they argue, would help the developed countries more than the underdeveloped since some 60 per cent of the commodities and raw materials in question originate in five developed countries: the United States, Canada, the Soviet Union, Australia and South Africa.

The conference decided to launch a comprehensive new programme of action to accelerate the development of the 31 least-developed countries to be carried out in two phases over the next dozen years with "much larger" flows of assistance. A resolution adopted to that end has been hailed by some, especially in the UNCTAD secretariat, as at least one solid evidence of the tangible progress made at Manila. Yet, in reality it means little more than a pious declaration of intent.

The United States blessed the objectives of the resolution, but had "reservations" about the paragraph on financial assistance. The Group D (that is, the "socialist") countries, while extending their support to it, declined to assume any financial obligations. The United Kingdom was unable to make any new commitment for assistance pending a review of all public expenditures by the new government. Without the financial wings the plan of action is bound to remain grounded indefinitely.

The conference discussed a number of other, mostly familiar, items without breaking new ground and without any breakthrough in sight, such as: world shipping and the LDCs' share; technology transfer and "brain drain"; future of "East-East" and "East-South" trade; protectionism in transport, banking and insurance; exploitation of sea-bed resources; economic cooperation among developing countries (ECDC); and rationalisation of UNCTAD machinery. In most cases, the only decision reached was not to take any decision, but to undertake future study and research, while negotiations among the different groups ended with a "friendly" consensus to continue the negotiations at another time and place.

This is where the world stands after five UNCTAD spectaculars. How long can if afford such dazzling non-development at a time of surging population and mounting poverty?



Interstate disparities in educational development

Jandhyala B. G. Tilak

The author focusses attention on the educational distance between the various states in the country. The states are at different stages of development and are characterised by different features in their educational system. Partial or piece-meal planning, involving little economic or social change, he says, can at best bring minor modifications. He advises macro-planning with an initial heavy critical minimum investment which alters the over-all structure and improves the level of education in backward states. This paper was presented at the all-India Conference on "Regional Disparities", organised by the Delhi Malayalee Association, Delhi, in April 1979.

DELIVERING THE presidential address to the American Economic Association in 1960, Schultz (1961) inaugurated the field of 'Economics of Education', which Bowman (1966) later termed as 'Human Investment Revolution in Economic Thought'. With Schultz's inaugural address on investment in human capital, 'in a single bold conceptual stroke the wage earner, who holds no property and controls neither the process nor the product of his labour, is transformed into a capitalist' (Karable & Halsey, 1977: 13). The new capitalist possesses peculiarly different features from the conventional capitalist. The new capitalist himself produces capital and possesses it until his last breath. The production and distribution problems get merged into one and they cannot be separately studied. So it is relatively of higher significance to study the regional disparities in human capital formation.

human capital formation

Human capital is formed through five important categories: (a) health facilities and services, (b) on-the-job training, (c) formal education, (d) study programmes for adults including extension programmes, and (e) migration of individuals and families (Schultz, 1961). But in this article we focus on human capital formed through education alone. Even the term educution we use here is extremely limited in its coverage. Machlup (1962: 51) distinguishes between eight types of education: (a) education at home, (b) education in school, (c) training on the job, (d) instruction in the church, (e) training in the armed forces, (f) education over television, (g) self-education and (h) learning from experience. Like most other studies, our study is also concerned with formal education alone—education in the school, as we do not have reliable data about the other types of education.

great equaliser

Education not only yields a huge set of benefits to the individual concerned as well as to the society in the form of a larger set of externalities, but it is also regarded as a great equaliser—improving income distribution, and reducing poverty and inequality[1]. So it is of high significance to study whether this great equaliser is equally distributed or not across different regions of our vast country.

Out of every 100 persons in Jammu & Kashmir 78 persons are illiterate, while only 30 are illiterate in Kerala. About 40 per cent of the children of age group 6-11 in Rajasthan do not go to school, while we do not find even a single child of this age-group out of school in Kerala, Tamil Nadu, Manipur, Meghalaya and Nagaland. Only 22 per cent of the children in the age group 11-14 are enrolled in middle level education in Orissa, while the corresponding figure is as high as 80 in Kerala. On an average in Manipur Rs 67.20 are spent per capita on education. In Bihar it is just Rs 15.30. In Himachal Pradesh direct expenditure per pupil works out to be Rs 305.00 while in Uttar Pradesh it is as low as Rs 107.20.[2]

WHAT do all these figures suggest? Each of them reflects one side or other of educational development. But no single indicator may be able to explain educational development in a comprehensive way. Some indicators like literacy rate, enrolment ratio, number of schools etc., may reflect purely quantitative development of education, while indicators like expenditure may represent quantitative aspects. The trouble gets aggravated since all the indicaters do not yield unanimous conclusions, as we have seen. When different indicators move in different directions, we can hardly make any observation as to whether the educational level in a particular region is higher or lower than in some other region, unless we construct a comprehensive index of educational development which considers all the important variables.

In this arrticle, we focus attention on the problem of inter-state disparties in educational development in India. For this purpose an index of educational development is constructed which presents a comprehensive and compact idea of educational development and disparties. Section II is devoted to the presentation of the method. In section III the results are presented and the conclusioas that emerge from our analysis are given in Section IV.

II

Our study is an inter-state comparative analysis wherein we propose to construct a weighted composite index of educational development. While constructing a similar index of development, Harbison & Myers (1964) in their famous study used arbitrary weights, which later became the target of severe criticism (see Sen 1966). In a similar study Rudolph & Rudolph (1969), Tilak (1977), and Pandit et al (1977) used unitary weights for all variables. While Goel (1975) used weights which relate to the earnings differentials, some other researchers

Panchamukhi (1970), Tilak (1976), used principal component analysis in the same context. Psacharopolous (1973) constructed constant cost-weighted index of educational development in his inter-country comparative study.

In this study we construct two kinds of weighted composite index of educational development. First, we construct a constant cost-weighted index using the cost proportions at the all-India level as the weights. If N_{ij} represents enrolment ratio at i-th level of education in the j-th state (enrolment as a percentage of population of the corresponding school/college going age-group), and W_i represents weights, defined as the costs of education per pupil at i-th level of education (C_i), as a proportion to the costs of education per pupil at primary level (C_1)

i.e., $W_i = C_i/C_1$ ....(1)

then the educational development index

$EDI_j = \Sigma W_i N_{ij}/\Sigma W_i$ ....(2)

In this case, the costs of education refer to all-India level, and accordingly W_i which are used to construct the composite index also refers to the same. As the weights (W_i) are thus constant for all states, we call this index Constant Cost-Weighted Index of Educational Development (EDI).

As the weights in equation (2) are derived from costs of education at national level, they fail to bring out inter-state differences in the qualitative aspects of education, which are expected to be reflected by costs of education. So instead of using constant weights, we use a seperate set of weights for each state derived on the basis of costs of education in that state,

i.e., $W_{ij} = C_{ij}/C_{1j}$ ....(3).

Thus an index with varying weights which can be called varying Cost-Weighted Index of Educational Development (EDI*) is given by

$EDI_j^* = \Sigma W_{ij} N_{ij}/\Sigma W_{ij}$ ....(4)

The index thus constructed is believed to be more comprehensive taking care of both quantitative and qualitative differences in educational development in vorious states.

The data on enrolments and costs of education[2] used in this study are collected from *Education in India 1974-75* and

TABLE I

Enrolment Ratios in Educational Institutions in India, : 1974-75

State	Primary	Middle	Secondary	Higher (general)
Andhra Pradesh	71.1	25.4	10.9	4.3
Assam	72.6	31.7	5.9	4.1
Bihar	60.5	24.1	3.4	2.1
Gujarat	86.2	38.9	4.8	3.9
Haryana	73.8	44.9	9.1	6.3
Himachal Pradesh	90.0	52.6	5.4	3.5
Jammu & Kashmir	61.6	39.1	6.8	5.1
Karnataka	87.6	35.2	7.7	5.3
Kerala	111.7	79.7	5.6	5.4
Madhya Pradesh	69.0	23.9	2.9	2.1
Maharashtra	95.2	42.0	6.3	4.6
Manipur	142.3	52.5	16.8	11.6
Meghalaya	109.7	36.0	8.8	7.2
Nagaland	138.2	56.8	5.7	3.7
Orissa	79.0	22.3	4.1	2.4
Punjab	87.4	45.9	8.1	6.7
Rajasthan	59.5	24.5	2.7	1.9
Tamil Nadu	107.7	46.1	5.0	3.7
Tripura	82.4	38.9	4.5	3.5
Uttar Pradesh	97.7	36.4	10.7	7.0
West Bengal	85.0	34.9	6.3	4.8
All-India	**84.0**	**35.8**	**6.2**	**4.4**

Source : Education in India, 1974-75

TABLE II

Institutional Direct Cost of Education (Per Pupil) in India 1974-75

(in rupees)

State	Primary	Middle	Secondary	Higher (general)
Andhra Pradesh	83.5	116.4	257.2	495.7
Assam	72.0	126.2	189.5	402.7
Bihar	73.0	85.4	145.0	576.7
Gujarat	109.7	114.0	260.6	522.7
Haryana	101.0	143.0	173.1	384.0
Himachal Pradesh	173.0	287.0	287.7	598.2
Jammu & Kashmir	137.3	193.0	192.2	408.9
Karnataka	95.0	92.4	327.6	367.6
Kerala	116.0	154.2	219.0	620.1
Madhya Pradesh	101.0	158.0	348.0	470.9
Maharashtra	119.3	134.0	266.4	508.3
Manipur	143.0	151.1	266.3	473.9
Meghalaya	60.2	150.2	194.1	534.8
Nagaland	157.3	196.3	335.1	647.5
Orissa	81.1	199.1	256.4	584.5
Punjab	103.2	143.6	203.8	500.8
Rajasthan	111.0	174.0	393.6	672.1
Tamil Nadu	109.0	120.2	224.0	632.8
Tripura	118.0	175.0	340.7	597.2
Uttar Pradesh	46.0	120.2	209.0	490.2
West Bengal	65.0	95.2	156.1	367.2
All-India	**83.0**	**127.0**	**235.6**	**508.0**

Source : Education in India, 1974-75

In our type of business, words cannot express our gratitude: so we give you the figures.

STATEMENT OF POSITION

31st December, 1978 Rs.	LIABILITIES	31st December, 1977 Rs.
5,00,00,000	Capital : Paid-up	5,00,00,000
7,00,00,000	Reserve Fund	6,50,00.000
1236,22,12,246	Deposits	987,62,21,114
53,39,43,500	Due to Banks and Correspondents	78,73,74.202
24,80,99,665	Bills Payable	11,26,24,371
103,75,19,358	Bills for Collection	81,15,39,631
19,82,71,905	Branch Adjustments, etc.	12.26,99,034
120,34,83,605	Acceptances for customers	79,91,64,088
	PROFIT & LOSS ACCOUNT	
2,21,52,980	Profit for the year	2,12,87,051
9,64,907	Less : Bonus for 1977 paid in excess of provision made in that year	20,17,810
2,11,88,073	Balance of Profit	1,92,69,241
50,00,000	Less: Transfer to Reserve Fund	50,00,000
1,12,00,000	Provision for Contingencies	90,00,000
25,00,000	Investment Reserve	...
24,88,073	Balance to be transferred to Central Government	52,69,241
1570,60,18,252	**TOTAL**	1262,98,91,681
	ASSETS	
190,96,12,574	Cash in hand and with Banks	155,05,44,106
16,03,66,070	Money at Call and Short Notice	9,57,32,900
309,61,10,117	Investments in Govt. and other Securities, Shares, Debentures etc.	256,57,95,904
790,61,98,866	Loans, Advances and Bills Discounted and Purchased	651,60,64,041
103,75,19,358	Bills Receivable	81,15,39,631
120,34,83,605	Constituents' Liabilities for Acceptances	79,91,64,088
3,93,11,719	Premises	3 58,03,581
6,05,42,041	Furniture and Fixtures	5,73,81,476
29,28,73,902	Other Assets, etc.	19,78,65,954
1570,60,18,252	**TOTAL**	1262,98,91,681

NUMBER OF BRANCHES

1978					1977
439		In India	Rural	418	
243			Semi-Urban	229	
216			Urban	209	
159	1057		Metropolitan	149	1005
	9	Outside India			9
	1066	**TOTAL**			1014

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~~8.84.44.00~~
~~57.70.44.58~~
~~9.08.59.84~~
~~57.25.26.1~~
~~50.59.348~~
~~984.96.92.47~~

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~~196 72.25 25~~
~~534 33 26.1~~
~~57 70 44.58~~
~~57 25 26 1~~
~~3 58 43 6~~
~~5 26 8 1~~
~~1 13.59~~
~~984.96.92~~

~~Rs.~~
~~5.00.00,000~~
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~~1 .24.371~~
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~~12.26.99,034~~
~~79,91.64,088~~
~~52,69,241~~
~~262.98.91.681~~

~~5.05.44.106~~
~~9.57.32.900~~
~~6.57.95.904~~
~~1.60.64.041~~
~~81.15.39.631~~
~~79.91.64.088~~
~~3.58 03.581~~
~~.73.81.476~~
~~19.7 65.954~~
~~262.98.91. 81~~

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they are presented in Tables I and II, as they themselves give some idea of inter-state disparities in educational development.[4] Our analysis thus refers to the year 1974-75, the latest year for which data are available.

III

Using the formulae described in Section II, two kinds of indices of educational development are constructed and they are presented in Table III.

Even though the two indices are constructed using two different formulae, we find much similarity between the two, particularly in rank ordering of the states. The Spearman-Rank Correlation Coefficient between the two is 0.9013, which indicates that they are highly correlated giving similar results.

Because of relative superiority of the varying Cost-Weighted Index of educational development over the other index, we use this index in our further analysis. Based on the EDI*, we group the 21 states of the Indian Union into four categories in Table IV—Advanced (Level I) States, where the index is above 25; Semi-Advanced (Level II) States where the index is between 20 and 25; Average (Level III) states having the index between 15 and 20; and Backward (Level IV) states where the index is less than 15. Means have also been computed for each group.

It is clear that there are glaring disparities in educational development between states. Apart from new states like Manipur and Nagaland where the development efforts may be intensive and on a large scale, Kerala and Himachal Pradesh are very forward in educational development, while states like Bihar, Rajasthan, Madhya Pradesh etc., are very backward. Even the 'average' states can be termed as backward, because the index is relatively at a very low level.

In this article we do not intend to explain these glaring disparities, as it needs an investigation in depth into the educational, economic, social, demographic and geographical patterns of the various states. However, we can make a few tentative observations based on our correlation and simple linear regression analyses, the results of which are presented in Tables V and VI.

We can not say that higher the level of

TABLE III

Index of Educational Development in India : 1974-75

State	Constant cost weighted index of educational development	Varying cost weighted index of educational development
Andhra Pradesh	17.45 (17)	14.51 (17)
Assam	17.79 (16)	15.18 (16)
Bihar	13.18 (20)	9.29 (21)
Gujarat	20.38 (12)	17.60 (12)
Haryana	23.12 (9)	21.07 (6)
Himachal Pradesh	24.03 (6)	25.50 (4)
Jammu & Kashmir	19.42 (15)	20.83 (7)
Karnataka	21.05 (11)	18.17 (11)
Kerala	33.68 (2)	26.87 (3)
Madhya Pradesh	13.75 (19)	11.81 (19)
Maharashtra	22.67 (10)	20.43 (8)
Manipur	35.69 (1)	37.01 (1)
Meghalaya	24.45 (5)	18.72 (10)
Nagaland	29.44 (3)	27.83 (2)
Orissa	14.68 (18)	11.86 (18)
Punjab	24.52 (4)	21.68 (5)
Rajasthan	12.91 (21)	9.78 (23)
Tamil Nadu	23.97 (7)	19.09 (9)
Tripura	19.76 (14)	16.36 (15)
Uttar Pradesh	23.87 (8)	16.79 (14)
West Bengal	20.13 (13)	16.95 (13)
All-India	**20.03**	**15.95**

Note : Figures in parentheses are rank-orders.

TABLE IV

States Classified by the Index of Educational Development

	Advanced states	Semi-advanced states	Average States	Backward states
Educational Index	25+	20-25	15-20	<15
Mean of the Index	29.30	21.00	17.35	14.31
	Manipur	Punjab	Tamil Nadu	Andhra Pradesh
	Nagaland	Haryana	Meghalaya	Orissa
	Kerala	J & K	Karnataka	Madhya Pradesh
	Himachal Pradesh	Maharashtra	Gujarat	Rajasthan
			W. Bengal	Bihar
			Uttar Pradesh	
			Tripura	
			Assam	

TABLE V
Coefficients of Correlation

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Educational development index	—	—.045	—.495	.430	—.167	.896	.422	.479	.035	.120	—.480	—.167	—·573
2. Per Capita Income		—	.227	.193	.483	—.052	.281	.209	—.668	—.395	.304	—.442	.234
3. Poverty ratio (%)			—	—.276	.444	—.637	—.535	—.112	—.395	—.214	.976	—.072	.579
4. Expenditure on education as % of state income				—	.302	.504	.375	.289	—.338	.180	—.284	—.511	—.210
5. Expenditure on education as % of state budget					—	—.176	—.058	.498	—.398	—.142	.445	—.498	.202
6. Expenditure on education per capita						—	.677	.452	.057	.270	—.613	—.042	—.534
7. Expenditure on education per pupil							—	.148	—.234	.219	—.487	.034	—.071
8. Effective literacy rate								—	—.162	—.176	—.127	—.399	—.411
9. Backward caste population (%)									—	.298	—.407	.370	—.384
10. Rural-urban population ratio										—	—.309	.134	—.337
11. Population as % to national population											—	—.064	.642
12. Child labour force participation												—	.266
13. Size (area) of the state													—

TABLE VI
Results of the Regression Analysis

(Explained Variable : Educational Development Index : EDI*) M=21

Equation No.	Explanatory variable	Constant	Regression coefficient	R²	F-Value
1.	Per capita income	19.60 (5.18)	—0.08 (0.20)	.0020	0.04
2.	Poverty ratio	22.30 (11.97)	— 0.71 (2.48)	.2452	6.17
3.	Expenditure on education as % of state income	14.47 (5.74)	11.76† (2.07)	.1847	4.30
4.	Expenditure on education as % of budget	23.68 (3.58)	—0.19 (0.74)	.0278	0.54
5.	Expenditure on education per capita	3.87 (2.11)	0.41** (8.78)	.8022	77.08
6.	Expenditure on education per pupil	8.16 (1.49)	0.06† (2.03)	.1782	4.12
7.	Effective literacy rate	8.47 (1.85)	0.30* (2.38)	.2298	5.67
8.	Backward caste population (%)	18.62 (7.63)	0.01 (0.15)	.0013	0.02
9.	Rural-urban population ratio	17.57 (5.97)	0.25 (0.53)	.0145	0.28
10.	Population of the state (% to national population)	22.45 (11.45)	—0.75* (2.39)	.2308	5.70
11.	Child labour force participation rate	22.19 (4.76)	—0.74 (0.74)	.0278	0,54
12.	Area of the state	23.41 (2.99)	—0.30** (3.04)	.3283	9.27

Note : Figures in parentheses are t-value. **Significant at 1% level *Significant at 5% level
† Significant at 10% level.

eeconomic development, higher will be the level of educational development. On the other hand, the converse may be true. as it is clear in the case of states like Orissa, Madhya Pradesh, Rajasthan and Bihar. However, we do not find strong relationship between economic development and educational development. The coefficient of correlation between per capita income and the educational index is not only as low as 0.045, but is also negative. The simple linear regression coefficient turns out to be small, negative as well as statistically insignificant, thus establishing no significant relationship between economic development and educational development.

But if we consider the poverty ratio (people below the poverty line in the state as a percentage to the people below the poverty line in the country), we find significant negative relationship between the two. The coefficient of correlation is —.495, and the regression coefficient is —.7091 (significant at 5% level). This not only shows the influence of poverty on educational development, but also speaks about the indequate representative character of the per capita income as a 'true' indicator of economic development

One can make a tentative observation that the geographical size of the state and educational development are inversely

TABLE VII

Educational and Other Characteristic Features of Indian States

	Per Capita Income 1974-75	Poverty ratio (%)	Expenditure on Education (1974-75)				Effective literacy rate (%) 1971	% of SC/ST to total population 1971	Rural-urban population ratio. 1971	Labour force participation rate among children 1971	Population as % to population of the country 1971	Area (000' Sq. KM) 1971
			as % of state income	as % of state budget (Rev. Account)	Per Capita (Rs)	Per pupil (Rs)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Andhra Pradesh	877	7.39	2.49	26.5	21.9	171.0	28.52	17.08	0,52	9.24	7.94	277
2. Assam	766	1.71	3.06	29.02	23.5	132.0	34.60	93.08	4.30	3.41	2.73	79
3. Bihar	718	12.82	2.13	27.4	15.3	118.0	23.35	22.86	9.00	4.42	10.28	174
4. Gujarat	1038	4.26	3.68	23.4	38.2	187.4	41.84	20,83	2.56	4.51	4.87	196
5. Haryana	1217	1.15	2.70	19.3	32 9	180.0	31.91	18.89	4.66	2.97	1.83	44
6. Himachal Pradesh	1037	0.42	5.94	26.3	61.6	305 0	37.30	36.33	13.36	5.01	0.63	56
7. Jammu & Kashmir	836	0.52	4.61	16.3	38.6	223.0	21.71	8.26	4.37	3.56	0.84	222
8. Karnataka	784	5.15	4.10	25.8	32.2	162 0	36.82	13.93	3.11	6.50	5.34	192
9. Kerala	861	4.72	5.70	39.1	49.1	191.2	69 75	9.56	5.12	1.30	3.89	39
10. Madhya Pradesh	830	8.51	2.87	29.0	23.9	178.2	26.37	33.23	5.14	6.11	7.60	443
11. Maharashtra	1270	7.88	3.52	26.2	44.8	208.0	45.77	11.86	2.21	4.74	9.20	308
12. Manipur	864	0.12	9.82	21.9	67.2	188.0	38 47	32.70	6.56	3.59	0.20	22
13. Meghalaya	—	0.12	—	14.6	37.1	117.2	35.06	80.87	5.87	6.91	0.20	22
14. Nagaland	—	0.07	—	12.8	56.1	210.4	31.32	88.61	9.12	7.02	0.19	17
15. Orissa	690	5.26	3.17	23.7	21.9	144.2	30.53	38.20	10.89	5.30	4.00	156
16. Punjab	1482	1.04	3.27	27.8	48.5	219.5	38 69	74.71	3.21	4.16	2.47	50
17. Rajasthan	767	3.96	3.50	24 1	26.9	219.0	22.57	27.95	4.67	5.16	4.70	342
18. Tamilnadu	942	8.88	3.66	26.0	34.5	176.4	45.40	18 57	2.31	4.58	7.52	130
19. Tripura	493	0.37	8.88	25.3	43.8	189.0	36.19	41.34	8.60	2.54	0.28	10
20. Uttar Pradesh	817	15.81	2.82	28.3	23.1	107.2	25.44	21.22	6.13	3.59	16.11	294
21. West Bengal	1065	9.80	2.30	24.9	24.6	128.0	38.86	25.61	3.04	2.69	8.08	88
All-India	989	100.00	3.08	26.5	30.5	168.0	34.45	21.54	4.02	4.67	100.00	3288

Note : —Not Available

Source : Col 1. Delhi Statistical Hand Book, 1979; 2. Report of the (Seventh) Finance Commission, 1977 3. Col. 4/Col. 1 (%) 4. Expenditure on education as shown in central & state annual budgets. 1974-75 to 1976-77. 5 & 6. 'Education in India 1974-75'. 7, 8, 9, 11&12. Statistical Abstract of India 1974. 10. Tilak (1979) related. For example, all the states of educationally advanced group are very small in size, while all the states in the bottom group—Madhya Pradesh, Rajasthan, Bihar etc.,—are big. The big size of the state may pose a problem for administrative efficiency and as such it may lead to educational backwardness. The coefficient of correlation between the size of the state (area) and the educational develodment index is —.573, and the regression coefficient is —.30 (significant at 1% level). Similarly population of the region (which is correlated with the size of the region, the coefficient being .673), has also negative impact on educational development. This negative relationship is also statistically significant.

social factors

Social and demographic factors may also substantially influence the educational development in any region. For instance, the states which are backward in educational development like Madhya Pradesh, Rajasthan and Orissa have relatively high percentage of backward caste population to total population. Further, they are also relatively agrarian economies with high concentration of population in rural areas. The ratio of rural population to urban population in the states like Orissa and Bihar is in the range of 9-15 per cent. But we find no statistically significant relationship between educational development and rural-urban ratio nor betweon educational development and ratio of backward caste population to the total population.

As a totalogy, child labour and educational development may be inversely related. Child labour (0—14 age group) as a ratio of total labour force is very high in the educationally backward states. It is 8.2 in Punjab and 5.6 in Bihar, as compared to 3.1 in Manipur, 3.95 in Nagaland, 1.27 in Kerala, and 3.33 in Himachal Pradesh. (see Titak, 1979). But our statistical analysis wherein we used labour force participation rate among children as the independent variable, does not establish any relationship between the two. Both the correlation coefficient and regression coefficient are small as well as insignificant. However, the signs of the coefficients, as expected, are negative.

IV

In this article, using the data on enrolments in educational institutions in 1974-75 and institutional costs as the basis of weights, a composite index of educational development is constructed, which presents a comprehensive and compact idea of educational distance between several states of our country.

The role of education in the socio-economic development of any region is widely recognised. The effects of educational disparities of the kind we investigated into on regional development are also worth noting. The availability of infrastructure such as education determines the location of production units including manufacturing industries, and accordingly influences the cost relationship and entreprenuers' decisions. The unavailability of educational facilities works as a disincentive for industrial location, which in turn leads to economic backwardness apart from social and cultural backwardness with increasing illiteracy and ignorance.

Our analysis shows that various states are at different stages of development with respect to education; and the different states are characterised by different features in their educational system. Further, social, economic and demographic factors influence educational development considerably. All this suggests that any partial or peicemeal planning involving little economic or social change can at best make some minor modifications to the problem, but cannot solve the problem to a considerable extent. So macro-planning with an initial heavy critical minimum investment which alters the overall structure of the society is necessary in order to improve the level of educational development in the backward states.

Notes and References

Notes

1. See OECD (1975) for the role of education as an instrument of achieving equality. See Also Tilak (1978) for some empirical details.

2. Except rate of literacy, these figures refer to 1974-75, while rate of literacy refers to 1971 census year.

3. Only direct institutional expenditure on education could be considered because of unavailability of data on other components of costs.

4. We considered only four levels of education —Primary, Middle, Secondary and Higher (General) Level—due to unavailability of data at other levels in the required form.

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TRADE WINDS

Industrial Output

According to the index of industrial production compiled by the Central Statistical Organisation, the rates of industrial growth during 1976-77, 1977-78 and 1978-79 were 9.5 per cent, 3.9 per cent and 7.4 per cent (provisional) respectively. This was stated by the minister of Industry, in the Rajya Sabha recently.

The minister discounted reports that the industrial growth rate had slowed down during 1978-79 or in the current year so far. The government, had taken several measures to improve the rate of industrial growth. Emphasis had been given to the importance of monitoring and management of industrial production in the country. An ad hoc committee of the cabinet for monitoring industrial growth was set up to continuously monitor industrial production and coordinate activities of the concerned ministries. High-powered monitoring cells had also been functioning in the DGTD, various administrative ministries and the Planning Commission.

Solar Energy Devices for Small Units

Solar energy devices for use by small industrial units are being developed. Research and development of solar energy in many other areas are also being intensified. Giving this information in Rajya Sabha, minister of state for Science and Technology, Mr Sher Singh, added that the government had given high priority for utilisation of solar energy for a wide range of applications with special emphasis on its use in rural areas. He said studies had been initiated for assessing the techno-economic feasibility of solar drying of a variety of agricultural and food products as well as in industry.

Booming Exports

The export performance in the first two months of the current financial year (April and May) has been excellent in that there has been a growth of 30 per cent. What is more heartening is the fact that there has been a favourable trade balance in April-May of about Rs 27 crores. According to the provisional figures for April and May the exports totalled Rs 941 crores against imports valued at Rs 914 crores.

Exports in May this year have been exceptionally good in that they totalled Rs 394 crores against Rs 202 crores in May last year, thereby registering a growth of 35 per cent. The provisional export figures for May this year are Rs 20 crores higher than even the revised figures for May 1978. Similarly, the provisional export figures for April and May 1979 are higher by Rs 81 crores, thereby showing a growth of almost 10 per cent over the revised earnings of Rs 860 crores in April-May 1978. The imports in April and May this year at Rs 914 crores were almost 20 per cent higher than the imports of Rs 765 crores during the same period last year.

Agreement with IA Officers

Indian Airlines Officers' Association has reached an understanding with the management on the charter of demands submitted by them. The understanding which covers about 800 officers of the airline provides for rationalisation of pay scales, a city compensatory allowance and a revised special compensatory allowance.

Management of Indian Airlines has earlier signed settlements with Air Corporations Employees' Union numbering over 10,500 covering non-technical categories of employees of the airline, and Indian Aircraft Technicians' Association representing technical categories of employees of about 2,400. Thus the wage demands of about 14,000 out of approximately 16,000 employees are settled. The wage agreements will be valid for a period of 3½ years from April 1, 1978 till September 30, 1981.

Standards for Trinidad

A complete set of Indian Standards were presented recently as a gift by Dr A.K. Gupta, director general, Indian Standards Institution (ISI), to Mr J.R.P. Dumas, High Commissioner of Trinidad and Tobago in India. Dr Gupta highlighted India's keen desire to share her technical know-how and experience with developing countries for their economic and industrial development and promotion of international cooperation.

Accepting the standards, Mr Dumas said India was a leader among developing countries in the field of standardisation and quality control. The ISI has been presenting complete sets of standards to developing countries of Asia, Africa and Latin America for use in the development of their own work of standardisation. Besides Trinidad and Tobago, such standards have been presented to Iran, Malaysia, Thailand, Iraq, the Philippines, South Vietnam, Jordan, Indonesia, Ghana, Bangladesh, Ethiopia, Barbados, Cyprus, Mauritius, Ecuador. Afghanistan, Nepal, Tanzania, Syria, Guyana and also to the Asian Development Bank.

Accord with Bankmen

The Indian Banks Association (IBA) has arrived at a settlement with the two representative organisations of the bank employees: The All-India Bank Employees Association and the National Confederation of Bank Employees. Under the agreement, the problem of DA which had defied solution for sometime has been resolved. The DA will be 1.5 per cent for every four point rise in the quarterly average of consumer prices index over 200 subject to a maximum of Rs 15. For the subordinate staff, the DA will be two per cent for every four points rise in the quarterly average of cousumer price index over 200 subject to a maximum Rs 15.

Janashakti Battery

The Janashakti battery is an important milestone in Union Carbide's long history of dedicated research and development in the field of battery manufacture. This is yet another effort by Union Carbide to give its consumers a better product at a very reasonable price. The Janashakti battery is a 3 volt pack, specially designed for use in torches using two standard size batteries. A single piece of Janashakti battery is thus loaded into a torch, offering the consumer a great deal of convenience. The Janashakti battery offers the consumer better value for his money, as it is protected by a PVC sleeve and a top seal, to guard against leakage and tampering, respectively.

Indo-British Research in Geotechnics

Joint research into geotechnics and fire is to be undertaken by Britain's Building Research Establishment (BRE) and India's Central Building Research Institute (CBRI). This will mark the first phase of BRE-CBRI agreement, which plans for collaboration in a wide range of subjects over the next three years. CBRI will work with BRE's geotechnics division on the development and application of instruments to monitor load transfer in under-reamed piles— a subject which the work of the two organisations is complementary. Collaboration will extend the research by widening the scope of the field measurements.

Indo-Algiers Joint Ventures

India and Algiers are negotiating cooperation agreement on setting up a series of projects, involving an outlay of Rs 320 crores in that country. The projects include a cutting tool factory, 1200 housing units and some railway facilities. An eight-member Algerian delegation would visit India shortly to see Indian institutions of research in medicine, agriculture, nutrition, nuclear science, and higher education and chemical laboratories. The Algerians have sought Indian help in setting up and running research institutions in their country. They have also shown interest in getting Indian researchers. The delegation will be here for a fortnight.

Taxation Pacts with Libya

An agreement to avoid double taxation and to prevent evasion of income was concluded with Libya last week. The Indian delegation was led by the Chairman of the Central Board of Direct Taxes, Mr V.V. Badami.

India and Libya also signed a protocol providing for mutual taxation benefits and greater participation of Indian firms in large value projects in that country. The protocol was signed by the co-chairman of the Indo-Libyan joint commission—the Industry minister, Mr George Fernandes and the Libyan Electricity minister Mr Juma El-Arbash. The tax concessions provided under the protocol, will benefit Indian enterprises and personnel and air and shipping companies operating in that country. A team of Indian experts would visit Libya soon for exploring possibilities of implementation and management of agricultural projects.

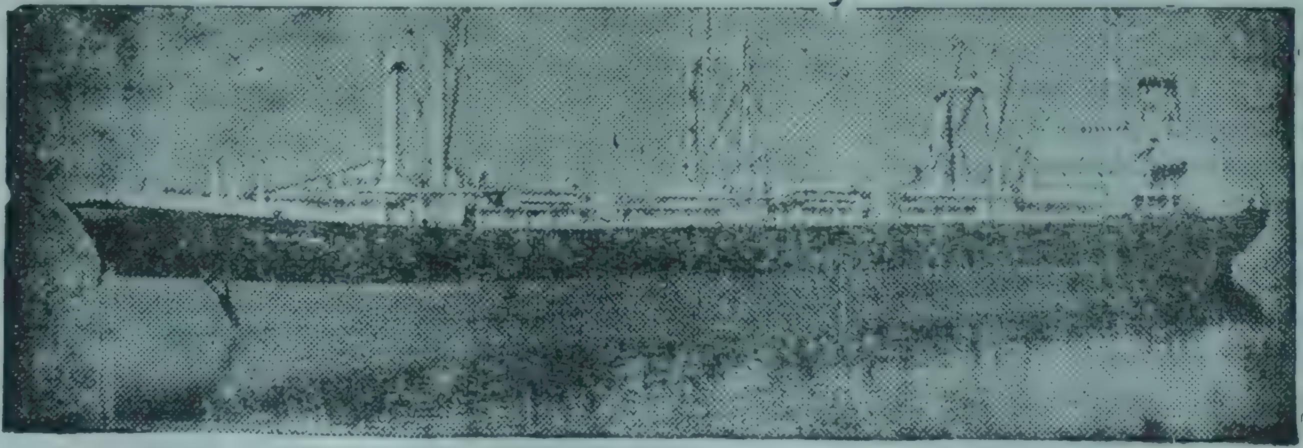
The agreement on double taxation will help promote the flow of trade, capital, technology and personnel between the two countries by removing tax obstacles. India has already entered into similar double taxation avoidance agreements with a number of countries such as Malaysia, Singapore, Tanzania and Zambia.

CDS Ordinance

The government promulgated an ordinance on July 4, to postpone by one year repayments of instalment of compulsory deposits falling due on July 6, 1979. A total of about Rs 345 crores will, thus, be withheld by government. The step has been taken to meet the present inflationary situation, accentuated by the recent increase in imported oil prices. To compensate the depositors, the rate of interest on the deposits is being raised from the present 11.5 per cent to 13 per cent.

The ordinance applies to the fifth and final instalment under the Additional Wages Deposit Account, the fourth instalment under the Additional Dearness Allowance Deposit Account (Old) payable in cash, and the second instalment under the Additional Dearness Allowance Deposit Account (New) payable by credit to the depositors provident fund. Subsequent instalments will also be similarly postponed by one year each. The dicision will not, affect premature and terminal payments of these deposits.

A press note issued by the Finance ministry stated that the government also proposes to postpone the repayment of instalments of deposits



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under the Compulsory Deposit Scheme (Income Tax Payers) Act 1974. Suitable legislation for this purpose would be introduced in parliament. These deposits are repayable in five equal annual instalments commencing from the expiry of two years from the end of the financial year in which these were made.

RBI Stir Banned

The government has acquired powers to prohibit strikes or "go slow" by the Reserve Bank of India employees under an ordinance issued on July 4. An official press release stated that the ordinance promulgated by the president gives powers to the government to issue an order prohibiting strikes or any conduct which is likely to result in cessation or substantial retardation of work in the Reserve Bank." The ordinance provides for penalties, including imprisonment or fine or both, for infringement of the order. The ordinance follows "continued agitation by a section of the Reserve Bank employees despite the reference of the dispute to the national industrial tribunal for adjudication," the release stated.

Rail Passenger Traffic

Passenger traffic on the Indian Railways registered an increase of 5.67 per cent during 1978-79 over the previous year's level of traffic. The number of passengers booked during the year totalled 370.2 crores, an increase of 19.85 crores over 1977-78 figures. The increase was registered in both suburban and non-suburban traffic, the former went up by 8.3 per cent and the latter by 2.4 per cent.

During March 1979 alone, 35.4 crores of passengers travelled by trains run on the Indian Railways showing an increase of 5.3 crores or 17.7 per cent compared to March 1978 figures. The suburban traffic during the month registered an increase of 28.6 per cent whereas the increase in the non-suburban traffic was only 3.69 per cent. As far as the freight traffic is concerned, the railways carried 18.49 million tonnes of originating revenue earning traffic in March 1979 as against 19.64 million tonnes in March 1978. The total revenue earning traffic lifted by the railways during 1978-79 was 198.93 million tonnes (provisional) less by 11.82 million tonnes carried during 1977-78.

Unit Trust

The Unit Trust of India (UTI) has maintained the dividend of nine per cent for units under unit scheme 1964 for the year ended June 1979. The UTI chairman, Mr G.S. Patel, announcing this recently said this was on an enlarged capital of about Rs 330 crores, of which as much as Rs 36 crores was added during 1978-79. Dividend was maintained at eight per cent on unit scheme 1971 (unit-linked insurance plan) and at three per cent on unit scheme 1976 (capital unit).

Mr Patel pointed out that sales of units during the year ending June 1979 was worth Rs 96 crores, an increase of 35 per cent over the preceding year almost reaching the target of Rs 100 crores. The target for the current year is Rs 65 crores. He said with the withdrawal of the exemption on capital gains, the trust would lose a class of investors. However, with the multiple benefit which the units offer, the trust was hopeful of mobilising fresh savings of the community. The total investible funds under all the schemes as on June 30, 1979, amounted to Rs 402.02 crores of which Rs 259.30 crores represented investments in the corporate sector.

Weekly Sugar Despatch Scheme

The central government has decided to reimpose restrictions on weekly sale and despatch of sugar from factories to ensure even flow of sugar in the market throughout the month and avoid price fluctuations. Under the new scheme, no producer can refuse to sell sugar to a recognised dealer subject to availability of stocks. Nor can he sell and despatch less than one-fifth of the monthly quota of sugar released to the dealers for sale four times in a month i.e. first to seventh, eighth to 15th, 16th to 22nd and 23rd to end of the month. This decision came in the wake of reintroduction of scheme of monthly releases of sugar earlier this month to maintain prices at a reasonable level.

Control of Paper Prices

The government has brought the price and distribution of white printing paper under statutory control as part of a package of measures to ease the current shortage of paper. Under the Paper Control Order 1979, promulgated recently the ex-factory price of white printing and cream wove or laid paper are fixed at Rs 3,000 and Rs 3,785 per tonne, respectively. The order, which comes into force immediately, empowers the government to issue directions to the manufacturers as to the disposal of their stock or sale of both varieties of paper on such terms and conditions as may be specified.

In increasing the price of white printing paper supplied to the educational sector at a special rate of Rs 2,750 per tonne under an informal agreement with the manufacturers, the government has conceded the long-standing demand of the industry. However, the government has felt it advisable to bring the price and distribution of white printing paper under statutory control. According to a press release of the Industry ministry, the price of white printing paper has been revised upward in view of the increase in the cost of inputs. The voluntary price agreement has been in force since 1974.

Groundnut Support Price

The cabinet at its meeting recently, took two important decisions to raise the support price of groundnut from the present Rs 175 to Rs 190 a quintal for the 1979-80 season and to formally nationalise the National Company, the Calcutta-based largest jute mill in the country. On the oilseeds front, the cabinet, however, favoured the continuance of the present support price of Rs 175 per quintal for soyabean and sunflower seeds for the coming season also. The decision to raise the support price for fair average quality of groundnet in shell has been taken to give a boost to groundnut cultivation and production. Normally, the support prices for oilseeds are announced around March. But the prices for 1979-80 have been fixed now in view of the government's policy that the support prices for oilseeds should be announced before the sowing season rather than at harvest time.

The proposal to nationalise the Nationalise Company had been made last month when the government granted the firm a loan of Rs 2 crores. The company's management was taken over by the government some time in 1976 as the company was running in heavy losses which accumulated to Rs 12.55 crores by the end of October 1977.

According to official sources, the assets of the company, aggregating Rs 10 crores, would be transferred to the nationaalised company in the form of equity shares worth Rs 7 crores and the rest, Rs 3 crores, as interest free loan. Together with the loan of Rs 2 crores given to the company already, the total cost of nationalisation would be Rs 12 crores.

Special Glass Manufacture

The Gujarat Industrial Investment Corporation Limited (GIIC) has joined hands with Shree Vallabh Glass group of companies to set up a glass complex in Gujarat, the first of its kind in Asia. The investment in the complex would be around Rs 50 crores. The funds would be raised by way of term loans from the financial institutions, banks and issue of share capital. The products such as, fibre glass, polyvinyl butyral foil, float glass and ophthalmic glass are proposed to be manufactured in the complex.

The demand of fibre glass and versatility of its application are quite known. The proposed complex will manufacture float glass and polyvinyl butyral foil for the first time in the country. The use of float glass is increasing day by day. In western countries the float glass has replaced sheet glass. In India also within near future it will replace the sheet glass. The float glass is gaining preference over the sheet glass because of its superior quality. With the increasing activities in building construction, automobile industry, railway coach building etc, the demand of float glass would be considerably higher in the near future.

Drilling Rigs for Drinking Water

Four rotary cum down-the-hole air hammer drill rigs (three are model B-80 rigs and one is model Rotamec 1300) arrived at Atlas Copco India and will soon be put to work in the water supply programme. The B-80 rig can drill up to 252metres (4″ dia hole) and the Rotamec up to 400 metres (6″ dia hole). Both these rigs have hydraulically operated feed and rotation systems which provide precise control and higher torque which enables them to drill deeper and faster. Built to operate in hard-rock terrain which defeats most efforts to tap underground water resources, these rigs have hydraulically operated feed and rotation systems which provide precise control and can drill deeper and faster than other rigs. They are capable of completing the drilling for a typical village well, in a hard-rock area, in a single day.

Names in the News

Dr P. L. Agrawal, chairman, Steel Authority of India Ltd has taken over as president of the Indian Institute of Metals for the year 1979-80. Till recently Dr Agrawal was one of the vice-presidents of the Institute and chairman of its Iron and Steel division. He is also a director of the International Iron and Steel Institute, Brussels.

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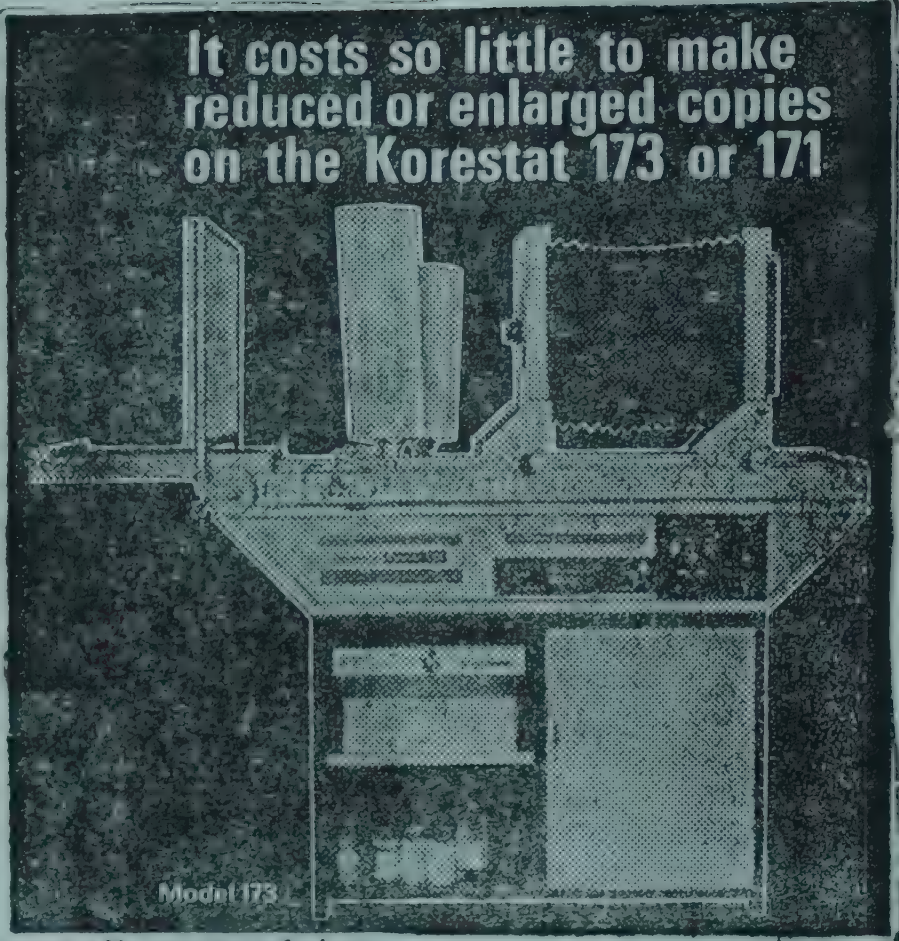
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* * *

COMPANY AFFAIRS

Gwalior Rayon

THE CENTRAL government has modified its consent order in respect of the additional issue of two million equity shares by Gwalior Rayon Silk Manufacturing (Weaving) Company Ltd to the effect that it will now make a rights offer to the existing shareholders on the basis of three new equity shares for every 25 equity shares held. It is stipulated that the rights offer will be made only to individual shareholders and not to corporate bodies, companies, trusts, financial institutions, banks, etc. and the maximum allotment under the rights will be restricted to 200 shares per individual shareholders.

As many as 100,000 equity shares will be offered to the employees of the company and the balance of shares left will be offered to the public through a prospectus These shares will be offered at a price of Rs 35 per share. The Birla group will not be entitled to participate in the offer of 80 lakh shares. According to the earlier consent order, the company was to offer one lakh shares to the employees and 19 lakh shares to the general public under a prospectus, excluding the Birla group.

The Bombay Shareholders Association had submitted a memorandum to the government suggesting that a part of these additional shares should be offered to the existing shareholders as rights shares. Two shareholders had also challenged the consent order in Bombay High Court. With the amended consent order issued by the government they have since withdrawn their writ petitions from the high court.

Manjushree Plantations

Manjushree Plantations Limited has produced quite encouraging results for the year ended March 1979, and the directors have maintained the equity dividend at 18 per cent. During the year under review, the company has earned a substantially higher gross profit at Rs 70.05 lakhs compared to Rs 44.62 lakhs in the previous year. After providing Rs 3.70 lakhs (Rs 4.73 lakhs) for depreciation, Rs 0.25 lakhs (Rs 0.83 lakhs) for the investment allowance and Rs 37.04 lakhs (Rs 19.80 lakhs) for taxation the company has earned a higher net profit of Rs 29.06 lakhs as against Rs 19.26 lakhs last year. The appropriations are general reserve Rs 23.81 lakhs (Rs 14.01 lakhs) and proposed dividend Rs 5.25 lakhs (same).

Dharuhera Chemicals

Dharuhera Chemicals Limited, a company promoted by Philips Carbon Black Ltd, is setting up a Rs 142.29 lakh project for the manufacture of sulphuric acid at Dharuhera, a notified backward area of Haryana. The project is being financed by share capital of Rs 45.29 lakhs, an unsecured loan of Rs 11 lakhs from the promoters, term loans of Rs 71 lakhs and a central subsidy of Rs 15 lakhs.

The company has already issued Rs 18 lakhs in equity shares of Rs 10 each and Rs 10,000 in preference shares of Rs 100 each. The company is offering to the public 270,255 equity shares of Rs 10 each and 150 (11 per cent) redeemable preference shares of Rs 100 each for cash at par.

The subscription list will open on July 30, and close on August 9 or earlier but not before August 1. The entire issue is underwritten. The company has entered into a technical collaboration agreement with Dharamsi Morarji Chemicals Co Ltd for the supply of the process know-how and engineering designs. The latter will also supervise the erection and commissioning of the plant. The project has a licensed capacity of 30,000 tonnes of sulphuric acid per annum.

India Radiators

India Radiators Limited will enter the capital market on July 23 with a public issue of 150,000 equity shares of Rs 10 each at par. Mr V. Chidambaram, managing director of the company, told newsmen that the object of the issue was to broad-base the capital of the company and to augment its working capital requirements. After the issue, the equity capital would move up from the present Rs 20 lakhs to Rs 25 lakhs.

Incorporated as a private limited company in January 1949 and converted into a public limited one in 1953, India Radiators now manufactures radiators for automobiles, trucks, tractors, heavy duty radiators, heat exchangers, oil coolers and similar equipment, for use in diesel locomotives, earth-moving equipment, heavy defence vehicles, stationary and marine engines. The licensed capacity of the company for automobile radiators as of 1958 was 12,000 radiators per annum. Today it stood at 36,000 radiators with an obligation to export 75 per cent of the production in excess of 24,000 pieces as long as the total production remained below 36,000 pieces. Production in excess of 36,000 pieces should be exported on a 100 per cent basis.

Remington Rand

The board of Remington Rand of India Limited has recommended an issue of bonus shares in the ratio of 1:2 to the equity shareholders subject to necessary approvals. The board has also recommended a dividend of 20 per cent for the year ended March 31, 1979. The company made significant progress during the year with sales rising to Rs 1,146.45 lakhs from Rs 1,041.66 lakhs as on March 31, 1978. The profit before tax rose to 207.10 lakhs from the previous year's level of Rs 165.61 lakhs. The provision for taxation is Rs 136.50 lakhs (against Rs 107.45 lakhs). The profit after tax is Rs 70.60 lakhs against Rs 58.16 lakhs for the year ended March 31, 1978. The disposable profit for the year is Rs 73.85 lakhs against Rs 59.81 lakhs last year.

Bombay Tyres

Bombay Tyres International Limited, formerly known as Firestone Tyre and Rubber Company of India Private Ltd is entering the capital market on July 9 with a public issue of Rs 1 crore comprising one million equity shares of Rs 10 each. The subscription list closes on July 19 or earlier but not before July 11. The issue is fully underwritten. The object of the issue is to reduce the non-resident interest in the company as required by the Reserve Bank of India under FERA. After the shares comprised in the public issue are allotted and fully paid the non-resident interest in the company will be reduced to 74 per cent.

The company has at present a paid up capital of Rs 3.33 crores. With the present public issue of Rs 1 crore and Rs 17 lakhs in equity shares of Rs 10 each reserved for employees and business associates, the total issued and paid-up capital will be Rs 4.5 crores. Of this, 26 per cent will be held by Indian nationals. The company has operated profitably ever since 1941 except in the last two years when demand recession following the oil crisis, power cuts and higher costs of inputs hit the industry. However, operating results for the current year have since improved and the company has shown a profit during the first six months of the current year. Its turnover is expected to exceed Rs 75 crores in 1979.

Goodricke Group

Goodricke Group Limited, formed by the amalgamation of eight UK-incorporated sterling tea companies with 17 gardens in West Bengal and Assam, will enter the capital market on July 25 with a public issue of 660,000 equity shares of Rs 10 each for cash at par. The subscription list will close on August 4 or earlier but not before July 27. The present issue consists of a total of 779,986 equity shares of which 60,000 are reserved for subscription by the public financial institutions and 59,986 by the employees (including Indian directors) and business associates.

The object of the issue is to reduce the non-resident holding in the company to a level not exceeding 74 per cent. The total valuation of the Indian undertakings of the sterling tea companies acquired by Goodricke Group as at the close of business on December 31, 1977 as going concerns, has been fixed by the Reserve Bank of India at Rs 282.20 lakhs. In partial satisfaction of this consideration, Goodricke Group has allotted equity shares of the value of Rs 1,44,30,000 and Rs 77,70,000 at par, respectively to Assam-Dooars Investments Ltd and Western Dooars Investments Ltd, nominees in the UK of the holding companies of the sterling tea companies. The balance sum of Rs 60.20 lakhs has been retained as an interest free loan, repayable in five equal annual instalments.

Ceat Tyres

A meeting of the board of directors of Ceat Tyres of India will be held on July 11 to consider the issue of non-convertible debentures to be offered to Indian shareholders resident in India as 'rights'. The additional finance is required by the company to augment its long-term working capital resources.

Indian Dyestuff

The directors of Indian Dyestuff Industries have maintained dividend at 16 per cent and also recommended payment of additional four per cent by way of silver jubilee bonus. According to preliminary figures, net sales are up from Rs 37.39 crores to Rs 46.61 crores and gross profit is also higher at Rs 6.37 crores against the previous year's Rs 5.58 crores. After providing Rs 1.43 crores for depreciation, Rs 1.07 crores for investment allowance and Rs 1.83 crores for taxation, net profit is Rs 2.02 crores compared to Rs 1.90 crores in the previous year. Out of this, the recommended dividend on preference and equity shares will absorb Rs 1.22 crores.

Sita World Travel

Sita World Travel (India) Pvt Ltd has expanded its capital base to cope up with its travel promotion and developmental programmes by the issue of bonus shares in the proportion of one bonus share for each fully paid equity share held, consequent upon the consent of the Controller of Capital Issues, according to Mr Rajiv Gujral, company secretary. The chairman and managing director, Mr Inder Sharma, has expressed satisfaction over the company's performance in 1978 and urged further growth targets in line with national policies, aims and aspirations.

In 1978 the company received the first prize of the department of Tourism, government of India, for earning the highest foreign exchange from the tourism amongst the travel agencies in India, the second such award since its inception in 1976. Its gross receipts increased 22 per cent and profitability by 23 per cent and the number of incoming foreign tourists by 31 per cent. With the opening of the Jaipur office shortly, the company will have a network of 11 branches in India and three promotion offices overseas. It now operates a fleet of 13 air-conditioned and non-airconditioned coaches and 20 commercial cars all over India.

Britannia Biscuit

Britannia Biscuit Company has received a letter of intent for the manufacture of soyabean products and is taking steps for early implementation of the project. For the anthraquinone project, the company is negotiating with organisations abroad who possess the technology involved. As regards the footwear project after careful investigation and prolonged negotiations

Heavy Engineering Corporation Limited.
(A GOVERNMENT OF INDIA ENTERPRISE)
FOUNDRY FORGE PROJECT
Scrap Processing Section
P.O. DHURWA: RANCHI-4
AMENDMENT No-1

to the Short Tender Notice No. 3/79 dt. 23-5-79 "Handling and Processing of Steel Scrap by Lancing/Oxygen Acetylene cutting in 03 shop/FFP and Transporting the same within Foundry Forge Plant, Dhurwa, Ranchi-4".

1. Tender sets consisting of General Conditions, Special Conditions, Schedule of work etc. can be purchased from:-
(a) Manager (Materials), Foundry Forge Plant/HEC Ltd. P.O. Dhurwa, Ranchi-834004.
(b) The Branch Manager/HEC Limited, 77 Park Street, Calcutta-700016.
on non-refundable cash payment of Rs. 50=00 **on any working days upto 25-7-79.**

2. Tender in sealed cove duly superscribed with Tende Notice No., Date and Name of work with Earnest Mone **will be received upto 2.30 P.M on 28-7-79** in the office o **Manager (Materials) Foundry Forge Plant, Heavy Engineering Corporation Limited Ranchi-834004** and will b opened on the same day a 3.00 PM in the presence o attending tenderers.

B. N. Chatterjee
Deputy Manager (S.P.S)/FFP
davp 763/(64)/7

with an overseas collaborator, the attendant risks were considered by the management to be too high, particularly in the absence of a firm commitment of assured offtake of the company's product by the collaborator. It was, therefore, decided to reconsider the project in the light of these developments. Meanwhile, the company is considering other proposals which provide opportunities to exploit its existing skills and expertise. Since the company will now be engaged in new and diversified activities, it has been considered appropriate to change the name to Britannia Industries Limited.

Keltron

The Kerala State Electronics Development Corporation, a Kerala government venture, has been given a Rs 5.5-crore turnkey contract for sophisticated electronic equipment by the Gujarat State Electricity Board for its 210 MW thermal power generating stations. This is the first major order received by Keltron for instrumentation and control equipment since its technical collaboration arrangement with Controls Bailey of France, which was approved by the government of India in September 1978. Keltron has to submit proposals for similar equipment to other state electricity boards and process industries in the country.

Vazir Sultan

The directors of Vazir Sultan Tobacco have declared an interim dividend of seven per cent for the year ending September 30, 1978. The interim dividend will be payable on or after August 14 next. The register of members and share transfer books of the company will be closed from July 31 to August 9, both days inclusive, for purposes of payment of the interim dividend.

Graphite India

Graphite India has announced that 100 per cent of the proposed dividend on equity and preference shares for 1978 will be exempt from tax in the hands of shareholders under Section 80-K of the Income-Tax Act.

Hindustan Sanitaryware

Hindustan Sanitaryware and Industries Ltd has reported excellent results for the year ended March 31, 1979. Production has increased from 6,226 tonnes to 7,148 tonnes. Sales have gone up to Rs 643 lakhs (Rs 525 lakhs) and the gross profit to Rs 149.38 lakhs (Rs 110.18 lakhs). Depreciation claims Rs 26.32 lakhs (Rs 14.80 lakhs), and taxation Rs 73 lakh (Rs 54 lakhs). The disposable surplus comes to Rs 38.44 lakhs (Rs 30.56 lakhs) and the same has been transferred to general reserve. The directors have proposed to raise the dividend to 20 per cent from 17 per cent paid for the previous year. There has been improvement in demand within the country and slightly less of demand on export markets. Exports for the year are lower at Rs 64.35 lakhs (Rs 67.21 lakhs). The company has received the fifth award in succession for the outstanding export performance from the Chemical and Allied Products Export Promotion Council (CAPEXIL).

Capital and Bonns Issues

The central government has accorded consent to fresh capital issues by the following companies:

Bonus Issues

(1) **Searle (India):** Rs 26,60,000 of Rs 10 each in the ratio of 1:1.

(2) **Didi Modes Pvt Ltd:** Rs 165,000 of Rs 100 each in the ratio of 1:1.

Further Issues

Usha Martin Black: Rs 1,30,000 fully paid equity shares of Rs 10 each at a premium Rs 2 per share to General Insurance Corpn. of India and its subsidiaries in conversion of a part of loan granted to the company.

Diamines and Chemicals Limited: Rs 140 lakh in equity shares of Rs 10 each for cash at par. To meet part finance for setting up a plant for the manufacture of ethylenediamine and polyamines in petrochemical complex area in Baroda.

Gwalior Rayon Silk (Mfg) Co: Rs 200 lakh in equity shares of Rs 10 each as under:

(i) A rights issue of 3:25 (excluding the Birla group);

(ii) One lakh shares to the employees of the company; and

(iii) Balance to be offered to the public by prospectus as required by the Controller of Capital Issues.

Refusals

Sawant Fisheries Pvt Ltd: Rs 257,000 in bonus shares of Rs 10 each in the ratio of 1:1.

HEAVY ENGINEERING CORPORATION LIMITED

(A Government of India Enterprise)

Office of the Manager (E.S.)

* * *

Artisan Hostel No. 1, Room No. 32, Dhurwa, RANCHI-4.

SHORT TENDER NOTICE No. 7/TC. DT. 20-6-79.

Sealed percentage rate tenders for the work mentioned below are invited from experienced and reputed firms. While submitting the tender, the name of the work may please be written on the envelope.

Construction of 64 Units of A type Quarters for CISF. Period of Completion. Ten Working Months. Earnest money to be deposited with the Tender Rs. 10,000/-.

Tender papers can be had from the office of the Jr. Manager (C-III) Division, Artisan Hostel No. 1, 1st Floor, Room No. 36, Dhurwa, Ranchi-4 on any working day during working hours from 1st July '79 to 30th July, '79 on payment of Rs. 50/- (Rupees Fifty) only in cash (Non-refundable) per set. Cheques & Postal Orders will not be acceptable. Tender may also be sent by the registered post if the postal charges of Rs. 10/- (Rupees Ten) only are sent along with tender fee. But the department is not responsible for any postal delays and loss in transit.

Tenders will be received in the office of the Jr. Manager (C-III) Division on behalf of Heavy Engineering Corporation Ltd., Ranchi upto 3 P.M. on 1st August, '79 and will be opened thereafter on the same day in the presence of tenderers or their authorised agents who may wish to be present.

A copy of General Condition of Contract and other documents are available for inspection at the office of the Jr. Manager (C-III).

Drawings of A type quarters to be adopted for CISF is under preparation. Drawings for other A type quarters constructed in HEC are available for inspection. Quantities shown in tender are approx. and are subject to change. Working months are from 1st Nov. to 30th June.

The tenderer shall submit the tender in two sealed covers. One containing the forwarding letter and earnest money and the other containing all other tender papers.

Heavy Engineering Corporotion do not bind themselves to accept the lowest or any tender and reserve the right to reject any or all tender or part of the tender without assigning any reasons thereof.

Tenderer shall quote rates both in figure and words. Conditional tender and such tenders which are not accompanied with requisite earnest money are liable for summary rejection. Right of sale of tender paper is reserved with the Corporation.

For and on behalf of
HEAVY ENGINEERING CORPORATION LIMITED
A. Guha
MANAGER (E.S.)
T. A, DIVISION

davp 763(65)/79

J. K. CHEMICALS LIMITED

Address of the Chairman—Shri Vijaypat Singhania delivered at the 31st Annual General Meeting on Tuesday, the 26th June, 1979

It gives me great pleasure to welcome you all at this annual general meeting.

The working of the company during 1978 has been on the whole satisfactory. Despite the severe set back in production experienced during the first five months of the year, the year ended with an increase in output of over 10% over 1977. I expect this trend to continue.

During the last ten years we have maintained sustained growth in production. Despite the growing competition the company's production of sodium hydrosulphite has grown almost three-fold in the last fifteen years from a level of 2000 tonnes in 1964 to over 5800 tonnes last year. We still continue to be the largest producer in the field and our products enjoy high acceptability with users both in India and overseas.

As a result of the low growth in demand juxtaposed with rapid increase in installed capacity in the industry and the sharp escalation in costs, very largely outside the control of management as the pricing and distribution of our major inputs is done through canalised agencies, the management has been constantly endeavouring to effect economies in costs by upgrading technology. The implementation of amalgam process modification is in full swing and the plant is expected to start up during the last quarter of this year.

Severe shortages have again emerged in most key sectors, coal, steel, cement, paper, aluminium, caustic soda, soda ash, to name some. This is largely due to very sluggish investment in the recent past which is causing severe capacity constraints in many areas. In others the total breakdown of infrastructure is causing immense loss of output to the nation. The shortfall in supplies in several cases is being made good through liberal imports wherever possible. This is indeed most paradoxical as the country finds itself today importing several commodities more particularly cement, steel and aluminium at prices much higher than the ex-works prices paid to local manufacturers. In short India is increasingly contributing to better utilisation of capacity and retention of jobs in the developed countries many of which are currently facing recessionary conditions. Had we been more circumspect in our planning and afforded greater freedom and opportunity to local industry this unfortunate situation would not have emerged.

For the last twenty years India's industrial policy has been very inward looking. IDR Act combined with severe restrictions on import has generated a highly insulated market. While for some period of time and in most cases infant industry protection was very necessary and desirable the process has been carried too far. Consequently Indian industry has by and far not been exposed to international competition even to a limited extent which alone could ensure that the quality of Indian goods and the cost of manufacture did not get out of alignment with the rest of the world. In the upshot while India has today a fairly diversified industrial structure in terms of technology many of its industries have become fairly obsolete. Further the quality of most of its products is certainly well below international standards. The fragmentation of capacity, brought about by the licensing policy, has resulted in poor economies of scale which combined with the cascading effect of the multiplicity of indirect levies at various stages has put the price of many products well beyond the reach of the consumer. In the process the consumption of most consumer and industrial products has remained at very low levels, in some cases the lowest anywhere in the world on a per capita basis.

India is fast losing the impressive lead it had built up in the industrial field in the 1960s even over developing countries. This is largely because of the lack of growth and competitive ethic in our policy making. Despite excellent human material we have in this country, both by way of entrepreneurial capabilities and managerial skills, we prefer to jog along at the rate of 3.5 per cent per annum though we could easily do twice as well if we were only able to effectively rally round all the productive energies in our country.

I, therefore, submit that with the favourable macro factors which we have today, particularly the comfortable foreign exchange situation, we must move rapidly in the direction of liberalising the economy by dismantling many of the regulations and controls which have become totally irrelevant in the changed context. For this purpose India's industrial licensing policy needs to be totally recast. Wherever factor endowments so allow capacity should be permitted to be built up not only for catering to domestic demand but even for exports particularly in areas where India has comparative cost advantage. Liberal import of know-how should be encouraged wherever necessary to bring this about. However, this policy needs to be carried right through and a stop-go approach in this regard will not do. For instance in the case of goods which are internationally traded, like steel, cement, aluminium to name a few, there is no reason why India should get out of established markets because of temporary domestic shortages. Most developed countries of the world have built up their foreign trade on a two way traffic importing and exporting the same commodity at the same time.

Even in the field of technology we are fast becoming obsolete. Our approach to technology is one of great complacency. We are most of the time happy with re-discovering at considerable cost of money, and even greater cost of time, what has been discovered elsewhere two or three decades ago. I, therefore, feel that a reorientation of policy in this regard is urgently called for. With our massive problems India cannot fall behind in adaptation of modern technology at least in the organised sector. That even the mos highly developed countries in the world have recognised this fact is borne out by a recent tudy in the Economist. Accor-ing to this study, know-how as been one of the fastest rowing items in the world rade. It was worth $11 billion n 1975, having grown from 2.7 billion in 1965. About 0% of this trade takes place ithin the industrial world. merica is by far the most ominant contributor account-ng for roughly one-third of he global earnings on royal-es and fees. The largest outgo vas in the case of Japan $712 nillion in 1975.

If Japan, at its present high evel of industrial development onsiders it expedient to import nd absorb know-how in such arge doses, why do we feel shy?

This brings me to the ques-ion of the general attitude of he government towards busi-ess. Despite the very credit-ble achievements of industry ne hardly hears of a public cclaim for the pioneering ffort. On the other hand overnment spokesmen hardly niss an opportunity of launch-ng a tirade against larger ouses. There are constant hreats of takeover of com-anies. Even in the case of bove par performance, where ompanies produce more than heir licensed capacity, threats re held out for penalising and rosecuting them. It is report-d that an amendment is being roposed to the IDR Act where roduction in excess of the icensed capacity could even be onfiscated. Even in terms of nanagerial remuneration most nrealistic ceilings are sought o be imposed. We seem to vork on the assumption that uman beings respond only to hreats. We as a nation should e mature enough to know hat this can never be so. Sure-y we are not trying to rewrite istory.

Here I would like to dwell a little on qualities of entrepreneurship. In public discussion today it is very facilely assumed that entrepreneurship is available in the country in plenty. In fact it is one of the scarcest resources in a developing society. It can only flourish and blossom in a climate where the results of its efforts are not only adequately rewarded but also commended. It certainly cannot grow in an environment where size is suspect, success decried and profit often assumed to be something dirty and undesirable.

The over regulation of the economy has had the most damaging effect on national character besides slowing down the wheels of growth. To me this is the most disturbing and corroding factor of national life. We have come to a stage when nothing moves unless undue influence is exercised. People in different walks of life have to be coaxed and cajoled to do things which is their normal task. So called public servants have become super masters. It was CHAUCER who said "Where gold rusteth what can iron do." To put it another way—"As above so below". Integrity and high sense of values have disappeared from our public life. Let me not for a moment give the impression that the business community is a bunch of angles. In fact to expect people in business and industry to maintain a code of conduct when those who should set high standards worthy of emulation flout with impunity is asking for the impossible. A sober reassessment of the situation would reveal that unless the moral and social fabric is toned up drastically, no amount of economic or technological progress will put us among the front-runners of the world.

Complexity of the law and the incredibly high rates of tax have made it virtually impossible for any assessee to be honest. An honest tax payer, the few that are left, at the end of the day starts wondering whether his integrity is being emulated by others or he is one of the rare creatures, bugged by a patriotic instinct, albeit at his own cost. In the process a good bit of productive time of the commercial community is spent in figuring out the ramifications of tax laws, whether it be direct taxation, or indirect taxation at the central, state or even civic levels. Evasion has proliferated. It has also created a God sent opportunity for the enforcing agencies to pressurise the assessees. This may sound rather harsh but it is a fact of life and needs to be told and accepted in its blunt reality. We may well ponder as to whether the incredibly high rates of taxes and its complexity, more than anything else has resulted in optimising revenue and minimising tax evasion. Empirical evidence would categorically establish that neither objective has been achieved or is capable of achievement. Why not then we try the other process—a highly simplified tax structure, minimising the points of taxation to avoid cascading and reposing a greater degree of trust and confidence in the assessee. The experiment tried three years ago of reducing the marginal rates of tax has certainly produced favourable results. But then any step which is a marked departure from the past must be given a logical time span, minimum of five years, to prove its efficacy, as we are dealing with human beings whose response is bound to be slow.

One of the biggest problems facing our country is the high rate of increase in population almost 14 million per annum. This is well beyond the resources of the country to maintain Whatever efforts we made in the direction of family planning and control till 1977 have unfortunately received a severe setback. Nevertheless the problem stares us glaringly in the face. The sooner we get to grips with it the better. Otherwise we will have to be running faster and faster just to stay where we are. However, even with the best will in the world any positive impact in this area would necessarily take some time. In the meantime the problem of meeting the needs of our growing population still remains. Surely there must come a time when people must ask "to what purpose has the planning exercise been undertaken?" It is for constantly being told to tighten their belt on shrinking stomachs? Or is it for a better tomorrow where atleast the reasonable necessities of life and a modicum of services which make life worth living are brought within the reach of the common man?

The task though formidable is not beyond our resource if we adopt the right strategy. If our sights are set on increasing production and productivity through liberalising the whole system of economic management we can achieve the goal much faster than what we have been able to do in the past. We have tinkered for too long with ideological solutions. Let us now embark on a new path where enterprise can play its true role, where state interference is cut down to the bare minimum, where increase in production and productivity and free and fair competition become our guiding stars.

Thank you.

Note: This does not purport to be a record of the proceedings of the Annual General Meeting.

United Industrial Bank Ltd.

Extracts from the statement by Shri J. N. Biswas, Chairman, United Industrial Bank Ltd., at the Thirty Ninth Annual General Meeting of the Bank at Calcutta, on June 29th, 1979.

Friends,

The major items of the Bank's progress have already been recorded in the Directors' Report and I shall not dwell any further on the same. I shall merely highlight a few points which, to me, seem to be requiring further thought. Most of you are possibly aware that with the opening of the 100th branch of our bank at Bulbulitala, District Burdwan, on 15th June this year, we have crossed a major landmark. At present, the number of our branches have further gone upto 105.

In 1974, we were having only 7 branches in semi-urban and rural areas. The number of such branches has gone up to 16 in 1975, 31 in 1976, 56 in 1977, 60 in 1978 and 73 as on date. In fact, during the rapid expansion since 1974, 85 per cent of the branches have been opened in semi-urban and rural areas.

From about Rs 21 crores in 1974 the deposits of the Bank had gone up by almost three times to Rs 61.77 crores by the end of 1978. Your Bank has been able to achieve and maintain an annual deposit growth rate of over 30 per cent during the last four years, which is well above the rate achieved by all the scheduled commercial banks. In achieving this growth rate the Bank is leaning heavily on the support of the small depositors.

Similarly, the advances of the Bank, which were only about Rs 12 crores in 1974, increased by almost four times to Rs 45 crores approximately by the end of 1978. The assisted units of the Bank include Tea, Jute, Chemicals, Engineering Industries, Cold Storage etc.

Under its priority sector lending programme the Bank is also assisting small traders and small businessmen, road and water transport operators, small scale industries, agriculture and its allied activities, as also exports.

With the opening of branches in rural areas the Bank's advances to priority sector have increased rapidly. We had only about Rs 4 crores as advances to priority and neglected sectors at the end of 1974. The Bank has recorded an increase of more than 150 per cent by the end of 1978 in respect of such advances and the total of priority sector advances has crossed the Rs 10 crores mark at the end of last year. At present such advances constitute about 23 per cent of our total advances. In addition to this the Bank is making satisfactory progress in lending under the Differential Rate of Interest Scheme, which has been adopted by us voluntarily and in terms of which the poorest among the poor is getting bank advances at the nominal rate of interest of 4 per cent p.a. We are also committed to bring the share of priority sector advances to 33⅓ per cent of total advances by 31st March, 1980.

In this connection, we should mention some of the difficulties we are facing in fulfilling our social obligations. The first point is the discrimination practised between the public sector and private sector banks under the different executive instructions of the Central and State Governments and local bodies. Several representations have been made by the Indian Banks' Association in the matter. Further, one of the recommendations of the Choksi Committee appointed by the Government of India to include certain savings in term deposits or cumulative deposits with public sector bank as eligible for the purpose of deduction under Section 80(C) of the Income Tax Act. The private sector banks have not been included in the recommendations. We strongly feel that such recommendation should not make any differentiation between two groups of scheduled commercial banks.

Secondly, as a result of a series of directives issued recently, such as stepping-up of statutory liquidity ratio, additional cash reserve ratio, impounding of 10 per cent of additional demand and time liabilities, incremental credit deposit ratio etc.,—more than 50 per cent of the bank funds are locked up in "pre-empted funds". In the absence of a social accounting system, under which the performance of a bank can be judged only by the social benefits it has been able to achieve, the only measure of a bank's efficiency is profitability. It should, therefore, be pointed out that there is a general declining trend in the "Spread" of the banks.

While the banks income is increasing, it expenses are also increasing at an accelerated rate. This is mainly due to impounding a sizeable portion of bank's resources by the Reserve Bank as a measure of control of monetary policy, deferment of charging interest on advances to sick units, increase of advances under DRI Scheme, etc. Further, there is also a fear of sizeable erosion of bank's profit when the new wage agreement with the employees comes into force.

My first suggestion is that the 10 per cent additional demand and time liabillties impounded since 14-1-1977 might be released by the Reserve Bank of India with the stipulation that such funds can only be deployed in financing priority sectors.

Another point which should be considered is the desirability of introducing an Interest Subsidy Scheme (on the same lines as Export Credit Interest Subsidy Scheme) for DRI advances as also refinance facilities for such advances.

Since the commercial banks are now considered the major agency for nursing the sick units, some amendments to the relevant statutes should also be considered so that when a bank has to acquire 51 per cent or more of the shares of such assisted units in order to safeguard the bank's interest, such units do not automatically acquire a subsidiary status to the bank. I also feel that refinance facilities at a suitable concessional rate should be made available to the banks for nursing sick units.

As a security for advances the banks have to obtain equitable mortgages by way of deposit of title deeds. Creation of such mortgages under the Urban Land Ceiling Act entails an inordinate amount of delay. It is, therefore, suggested that equitable mortgages created in favour of the banks should be statutorily exempted from the jurisdiction of this Act.

Similarly, the banks have to face a lot of difficulties in recovering the dues from assisted Colliery Units which have already been nationalised, due to the extreme delay in awarding the compensation. Colliery compensation should be awarded expeditiously and the interest accured on the loans obtained by such companies from the bank should also be taken into consideration.

The Government should also instruct the nationalised insurance companies that insurance claims from banks at leas should be honoured expeditiously.

The Board of Directors o your bank has recommende dividend on the share capita at 7½ per cent (subject to de duction of tax). As you kno that the dividend is paid out c the retained profit after pay ment of the corporate tax an as the rate of dividend pr posed is less than the intere of long term deposits, Gov may kindly consider allowin dividend as a deductable ite before arriving at the tax bas The elements of interest a dividend on the funds provid by the investors (i.e. lende and proprietors) should not viewed differently as th costs are incurred by a bu ness unit in order to induce investors to part with th liquidity.

Note: *This does not purp to be a record of the proceedi of the Annual General Meeti*

Deteriorating world economic situation

RECORDS AND STATISTICS

The pace of global economic activity is weakening and is likely to weaken further in the coming months, according to the *World Economic Survey, 1978*, recently issued by the Department of International Economic and Social Affairs of the United Nations. The *Survey* consists of four chapters, an overall assessment of the world economic situation and three regional chapters on current trends in the developing countries, the developed market economies and the centrally planned economies.

THE GROWTH of world output decelerated quite substantially, in the year 1978, averaging only 3.8 per cent as shown by the table. The slowdown of growth in 1978 follows on weaker growth trends that have been in evidence for several years and an incomplete recovery from the 1974-75 recession in the developed market economies, the worst in the post-war period.

Downward Trend

In the developing countries, the average rate of growth of GDP was only four per cent in 1978. As in other regions, the trend of growth is downward. During 1976-78, GDP growth rates averaged 5.2 per cent per annum, a figure which contrasts unfavourably with the 6.2 per cent recorded during the 1971-75 period and with the six per cent target set in the International Development Strategy. In the non-oil-exporting countries, growth rates averaged only 4.6 per cent during 1976-78. To some extent, these weakening growth trends in the developing world are the result of sluggish export earnings and a deterioration in the terms of trade. In addition, uncertainties regarding the future availability of external financing on appropriate terms has dictated cautious import policies in a number of countries.

In the developed market economies, recovery from the 1973-75 recession has been sluggish and far from complete and output growth rates for the period 1976-78 were substantially below their long-term trends.

Thus during the current recovery, the average annual rate of growth of GDP in these countries has been only 4.2 per cent, as compared with five per cent in the 1961-70 period. Moreover, the recovery has tended to lose steam in the past two years, with the average growth rate dropping to 3.6 per cent. Three factors are important in accounting for the poor growth performance of recent years.

First, private fixed investment has failed to pick up in line with historical experience during recovery periods in practically all countries.

Second, economic policies have been constrained by the co-existence of high inflation with slow growth and high levels of unemployment.

Third, the recovery from recession has been marked by large payments imbalances as between countries, the correction of which appears to have imparted a deflationary bias to the world economy. In turn, these external disequilibria have resulted in sharp exchange rate fluctuations which have contributed to the general climate of uncertainty.

During 1978 the growth of net material product fell short of planned magnitudes in all the centrally planned economies of eastern Europe other than the USSR, and the average realised growth rate was 4.2 per cent, as compared with a target growth rate of 4.7 per cent. As in other regions, the medium-term growth tren has been downward, the ave rage rate of growth fallin from 6.3 per cent in 1971-7 to 5.0 per cent in 1976-78. Th main constraints to growt appear to have been externa imbalances, as well as interna bottlenecks especially in th energy and transport sectors.

A number of medium-ter trends have also made the presence felt. These include slowing down of the rate o growth of the labour force an a tendency for the capita intensity of production t increase.

According to the *Surve* during 1979 many developin countries are likely to hav difficulties in maintainin their rates of growth of outp

Rates of Growth of GDP by Major Regions: 1971-78

(Percentage

	1971-75	1976-78	1977	197
Developing Countries	6.2	5.2	5.9	4.
Oil-exporting	8.6	7.6	9.4	2.
Non-oil-exporting	5.7	4.6	4.7	4.
Developed Market Economies	3.0	4.1	3.6	3.
Centrally Planned Economies of Eastern Europe and the USSR*	6.3	5.0	5.0	4
World	4.1	4.4	4.2	3

*Net material product,

Source: Centre for Development Planning, Projection ar Policies of the United Nations Secretariat, based official international and national sources.

at even the modest levels achieved in 1978. A large number of countries may be unable to adequately increase their import levels and in some countries imports especially of capital goods, may even decline.

Heightened Difficulties

Most developing countries are expected to experience heightened difficulties in their external accounts. These countries will be adversely affected by the expected further slowdown in the developed market economies, which are their major export markets and given the poor growth prospects of the developed market economies, the likelihood of any further liberalisation in the trading environment in favour of the developing countries is small. For these reasons, rates of expansion in the volume of exports are expected to be lower than in 1978. Moreover, the terms of trade of the non-oil-exporting developing countries are expected to deteriorate further.

Higher rates of inflation in the developed market economies will continue to push up the prices of manufactures imported by developing countries. In addition, higher oil prices will raise the oil import bill. On the other hand, in view of economic prospects for the developed market economies, with few exceptions primary commodity prices are unlikely to keep pace with international inflation rates.

The collective current account deficit of the non-oil-exporting developing countries is expected to rise substantially. If adequate financing is forthcoming, it now appears likely that the current account deficit could reach US$50 billion, as compared with less than US$30 billion in the period 1976-78. While the developing countries which are considered credit-worthy by international banks are unlikely to encounter major difficulties in financing their increased deficits, this will not be the case for many lower-income developing countries which do not have adequate access to international capital markets and for some countries which have accumulated large external debts since 1973.

The prospects of developing countries are strongly influenced by the slowdown in the pace of economic activity and the increase in the rate of inflation expected in the developed market economies. Current forecasts for 1979 suggest an aggregate increase in GDP of only between two and three per cent. These forecasts are based on the expectations that, on present trends and policies, the growth of economic activity will decelerate substantially in the United States of America and will not accelerate in Europe and Japan.

Reducing Demand

While present policies in the United States are clearly designed to dampen domestic demand so as to reduce inflation and to bring the external accounts into better balance policies in the other major industrial countries are unlikely to lead to a sustained increase in output and imports. High rates of inflation in some countries and fears of re-igniting inflation in others have inhibited policy-makers from taking sufficiently strong measures to stimulate their economies.

The world economic picture could be further complicated by the recent tightening of oil supplies. The price increases to which it has given rise may have an additional adverse effect on aggregate demand in oil-importing countries while at the same time adding to the upward trend in domestic costs. Moreover, the rise in oil prices may retard the correction of the current account deficits of a number of developed market economies, particularly the United States and may create additional financing difficulties for the non-oil exporting developing countries.

Static Output

Among the centrally planned economies of eastern Europe and the USSR, no substantial acceleration of output is expected in 1979. For the group as a whole current targets imply a growth in net material product of 4.5 per cent as against the increase of 4.2 per cent recorded in 1978. While some improvement can be expected in 1979-80 from the recent commissioning of some major CMEA projects in the energy area, bottlenecks in key sectors of the economy are expected to continue to exert a dampening effect on growth rates in these countries.

The *Survey* draws attention to a number of policy implications of the current world economic situation. Substantial increases in official external financing on appropriate terms and conditions will be required if developing countries, particularly the lower-income countries, are to avoid a further slowdown in their already unsatisfactory growth rates. An enlargement in the volume and an improvement in the quality of financial flows would also make a contribution to greater external balance in the world economy at higher rates of growth of output.

A rapid increase in official flows to developing countries is also required in the light of the effect of inflation in the world economy on the real value of such flows. When current account deficits of non-oil-exporting developing countries are measured relative to the export earnings or domestic product of these countries, the deficits are seen to have diminished significantly in recent years, and to be smaller than they were in the early 1970's. This reflects, in part, the substantial balance of payments adjustments undertaken by developing countries in recent years.

It also reflects the impact on developing countries of price inflation in the world economy which raises their financial requirements while reducing the real value of available flows. This has been particularly troublesome for countries that depend on official sources of external finance, the value of which is not always adjusted to reflect changes in prices. More extensive financial budgeting in real terms may therefore be helpful as part of the process of accelerating the flow of development finance.

Stimulatory Measures

In the developed market economies, in order to counteract existing recessionary tendencies, further stimulatory measures may be apptopriate in those countries which are now enjoying comfortable external positions. However, in the present inflationary environment the policy package should contemplate innovative incomes policies and should focus also on increasing overall productivity. In this latter regard, short term policy needs merge with the medium-term requirements for progressive adjustments toward a more efficient and productive international structure of production.

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Through the eyes of a child

If there weren't any medicines
The doctors would be helpless
So would all the nurses
and all the big hospitals.
If my teddy had a heart attack
Or diarrhoea in his toe
Pray what would i give him
To make the pain go?

8/11/79

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market
exceptions primar
prices are unlikely to keep
with international inflati
rates.

The collective curren
account deficit of the non-oil-exporting developing countries is expected to rise substantially. If adequate financing is forthcoming, it now appears likely that the current account deficit could reach US$50 billion, as compared with less

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ECONOMIST
JULY 27, 1979

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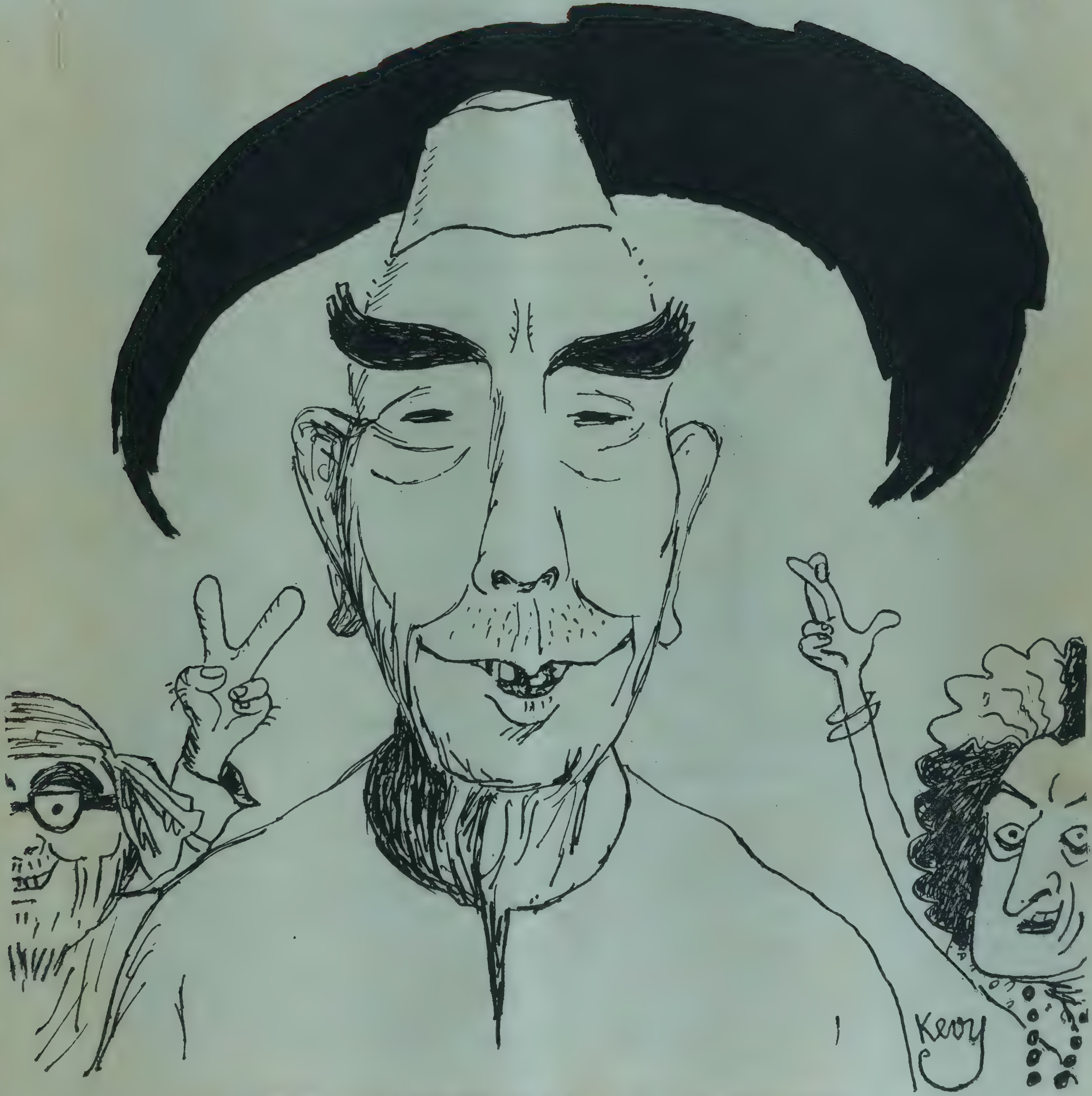
C.F.T.R.I. MYSORE



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The new prime minister

MR CHARAN Singh (rather Mr Raj Narain) has won. After a scrutiny of the claims submitted by him and Mr Morarji Desai, the caretaker prime minister since July 15, Mr Charan Singh has been invited by president Sanjiva Reddy to form the new government at the centre. The oath-taking ceremony is likely to take place tomorrow. This brings to a close another important chapter in the short post-independence history of democracy in this country.

The new prime minister will head a coalition government, as his supporters are a conglomeration of a number of parties and groups in Lok Sabha—his own breakaway group from the Janata party which has been styled as Janata (Secular), the Congress party headed by Sardar Swaran Singh, the Congress led by the former prime minister. Mrs Indira Gandhi, the factions led by Mr H. N. Bahuguna, Mr Biju Patnaik, Mr George Fernandes and Mr Madhu Limaye, the Communist Party of India, the Peasants and Workers Party and the Muslim League. The Akali Dal, which had remained neutral in the race for prime ministership between Mr Charan Singh and Mr Desai (who continues to lead the Janata party—the largest one—in Lok Sabha) is expected to join hands with the winner. The CPI(M), the Forward Bloc, the Republican Party of India and the National Conference too remained neutral in this power struggle. They are likely to lend indirect support to Mr Charan Singh for they may not like to topple him soon.

The AIADMK has announced that it will judge the performance of the new ministry, particularly in regard to the language issue, the state autonomy and devolution of funds from the centre to the states. It is opposed to dethroning Mr Charan Singh, even though in the power struggle it had sided with the Janata party whose other supporters for making Mr Desai again the prime minister included the United Parliamentary Forum, some independents and 21 members who were expected to leave the Congress-S. The Congress-S remained united, notwithstanding the fact that several of its members had asked the leader of this party, Mr Y. B. Chavan, (who was also the leader of the opposition) not to include their names among the supporters of Mr Charan Singh. The unsubstantiated claim for Mr Desai about these members went against him.

It is, indeed, ironical that Mr Charan Singh has to depend on the Congress-I support, even though it is to be from outside, for remaining in power. He was one of the founders of the Janata party which was formed in early 1977 to dethrone Mrs Gandhi who, he had till lately proclaimed, represented the dictatorial tendencies in the country. In its fight against the Jana Sangh, which is denegrated as a communal organisation, the Janata-S has preferred even the Congress-I support apparently considering that dictatorial tendencies are less harmful to the country! As argued in this journal last week, the fight against the Jana Sangh was just a facade for the power struggle.

It remains to be seen whether the new government will be able to carry on till the next election to Lok Sabha in 1982. Much depends on how the different constituents of the new coalition, whether they participate in the ministry-making or continue to lend support from outside, behave. Mr Charan Singh has denied that the support to him from his collaborators is conditional in any way. But he is yet to announce his policy on such crucial issues as the recent ordinances on the CDS and the Reserve Bank employees' agitation, the grant of bonus to railwaymen, and the cases against Mrs Gandhi and her collaborators during the emergency (some of them have already been referred to special courts). As deputy prime minister (Finance) in Mr Desai's government till July 15—he resigned from the Janata party the next day to head the Janata-S—he was directly concerned with the issuance of the above two ordinances and was stoutly opposed to the bonus for railwaymen. He was also a party to the decisions of the previous government on the emergency cases. Any soft-pedalling of these issues apparently will be indicative of the fact that some commitments were made by him before he received support from his collaborators.

Mr Charan Singh is also said to have finalised an eleven-point programme on the basis of which the coalition government is to be run. This programme included laying of special stress on rural development and rural industrialization, equal importance to heavy and other industries without injuring the small-scale sector, allowing the public sector to play the key role in the economy, keeping the nuclear option open, introduction of prohibition through education and persuasion, and not forcing Hindi on the southern states. The foreign policy is to be continued on non-aligned basis as in the past.

the programme

It should be possible for the new prime minister to ensure full cooperation from his supporters from other parties on the basis of this programme. But still it is difficult to say how long the conglomeration will remain intact. Among the other important issues which Mr Charan Singh will have to face immediately are the unabated uptrend in prices since he presented this year's central budget, the near breakdown of infrastructure in various parts of the country, the difficult law and order situation in several areas and the deep unrest on the labour front. He has been asked to seek a vote of confidence in Lok Sabha in about three weeks' time. There cannot be any doubt that he will fulfil this condition. But tensions may develop in not-too-distant a future. Mr Charan Singh has assailed Mr Desai for the failures of his government. But surely, he cannot escape blame on this count. He was the second most important member of the outgoing cabinet.

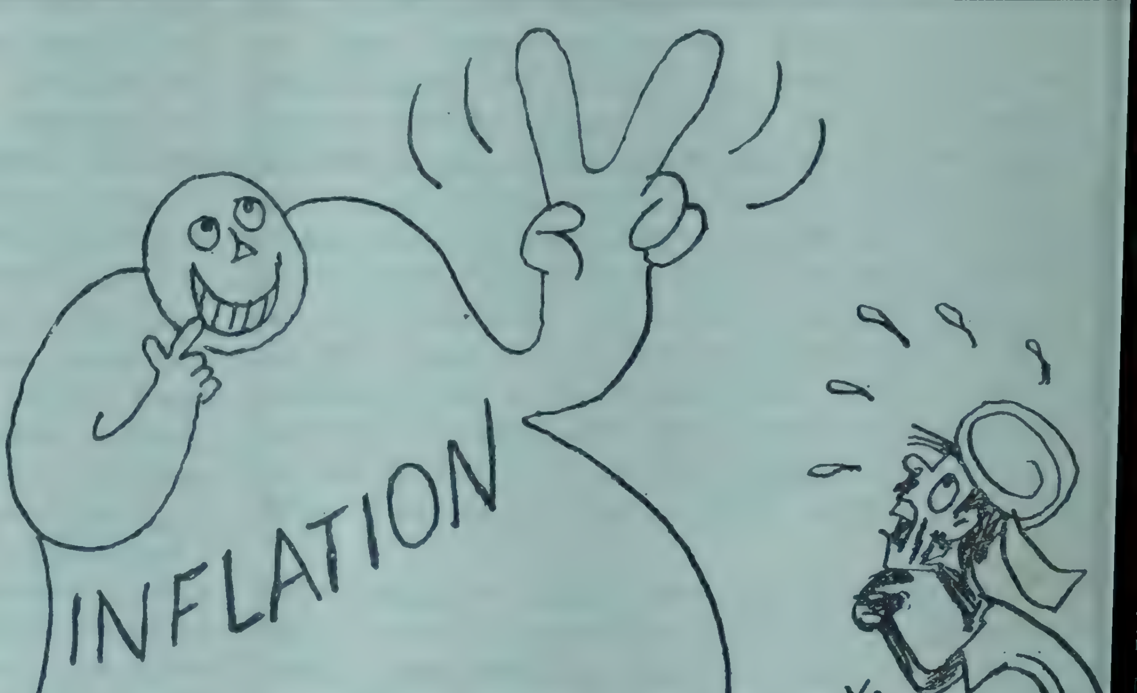
If the prime minister-designate is able to give a clean government to the people, that in itself will be a great achievement. But there can be no denying the fact that the power of the centre currently has been eroded considerably and if the various constituents of the new government, which have been pulling in different directions in the past, do not effectively collaborate, a mid-term poll may have to be ordered. If that happens, the Janata-S may remain in power as caretaker, which is said to have been part of its strategy.

The Chief Election Commissioner, Mr S. L. Shakdher has indicated that it would take at least six months to hold a mid-term election to Lok Sabha, for the completion of electoral rolls alone would take not less than four months. This revision is necessary because the existing rolls were prepared four years ago. Apart from the time required for revising the electoral rolls, there will be difficulties arising out of the monsoons and agricultural operations.

This assertion of Mr Shakdher raises an important issue. In terms of the constitution, six months cannot intervene between one session of Parliament and the next. Surely, this will be applicable in the case of last session of a dissolved Lok Sabha and the first session of the successor House. The vastness of the country, the wide diversity in climatic conditions and agricultural operations, the large size of the electorate, etc., undoubtedly, make the holding of a general election an arduous proposition. But the constitutional requirement warrants tha revision of electoral rolls cannot be allowed to take so long a time. The Electio Commission apparently has to devot attention to this issue. Perhaps, the revision of electoral rolls will have to b made a continuous process, despite th heavy cost involved.

An offshoot of the power struggle a the centre that can be expected is th destabilisation of several state governments. Already a censure motion ha been admitted against the Bihar government. Similar moves may soon be mad in Himachal Pradesh and Haryana Some repercussions in Maharashtra an Karnataka too cannot be ruled out.

The opposition at the centre, of course will be a strong single party. Mr Jagjiva Ram, the other deputy prime minister i Mr Desai cabinet, who at one time wa reported to be a serious contender fo the leadership of the Janata parliamentar party after Mr Desai tendered his resignation from the prime ministership had reconciled to Mr Desai's leadershi before the choice of the new prime minister. Some rethinking has again startec that there should be a change in th leadership of the Janata parliamentar party. It is being argued that had M Desai yielded place to another leade after stepping down from prime ministership, particularly Mr Jagjivan Ram, th position might have been different. Th



Double digit inflation rate has hit the country—Report.

announcement of the RSS chief that the legislators among the Jana Sangh would sever their links with the RSS and the constitution of the RSS would be amended soon for this purpose too perhaps came too late. Some consider it insufficient also.

For its failure to re-form the government at the centre, the above should suggest, the Janata party has largely to blame itself. It lost good time after Mr Y. B. Chavan, the opposition leader, who was the first to be asked by the president to explore the possibilities of forming the new government, had reported his failure. Mr Desai and Mr Charan Singh were asked to explore these possibilities simultaneously. The Janata was somewhat late-starter.

In one way, the new central government will be an honest coalition. The experiment at merging various parties into one unit for running the government has not succeeded. Most constituents of the Janata party did not prefer to lose their identity, despite protestations to the contrary.

Coal price hike

THE LONG-awaited step-up in the prices of various categories of coal was announced by the central government last week, to be effective from July 17. On an average, the supplies from Coal India Limited at Rs 101.18 will cost Rs 36.47 a tonne more, the pre-July 17 average price being Rs 64.71 per tonne. The escalation allowed to the Singareni collieries is of smaller order—to Rs 99.92 per tonne from Rs 68.70. Simultaneously, the central excise duty of Rs 5 per tonne on non-coking coal and Rs 7 per tonne on coking coal has been withdrawn. The actual impact on consumers, thus, it is officially stated, will be Rs 25.67 per tonne in the case of supplies from Coal India Limited and Rs 21.22 a tonne in respect of those from the Singareni collieries. The price of soft coke has been retained at the level of raw coal equivalent so as to provide some relief to domestic consumers.

The coal price issue had been under the consideration of the government for over two years. The last increase in the producer prices to the tune of Rs 15 per tonne was granted in 1975, but the cost to the consumers was subsequently raised in 1978 when the then Finance minister, Mr H.M. Patel, imposed excise levies at the above-mentioned rates on the coking and non-coking coals and at the rate of Rs 10 per tonne on hard coke, to yield annually Rs 58 crores. At that time, although the government thought that the losses of the coal industry, which after nationalisation were subsidised by the central government to varying degrees, had to be recouped, a better way of doing so would be to levy excise duty the proceeds of which could be utilised for meeting at least a major proportion of the subsidy involved.

reduced subsidy

Subsequently, a committee was appointed under the chairmanship of Mr G.C. Baveja to recommend steps to effect economies in coal production costs. This committee made wide-ranging recommendations to reduce costs over a period of time but felt that the escalation in equipment prices, wages, etc., would mitigate against the proposed economies. So it also favoured allowing some increase in coal prices. No decision, however, was taken to raise prices further and the industry was asked to first contain its production costs. The subsidy involved had been reduced considerably through the imposition of excise duty. It was felt that it could be continued in the overall interests of price stability.

The recent agreement with colliery workers on their wages and other service conditions, which has entailed an additional burden on the industry to as large an extent as Rs 115 crores per annum, and the growing costs of raising coal, however, have changed the position radically. Had the prices of coal not been enhanced, the subsidy involved would have grown this year to over Rs 300 crores. Last year, it was of the order of Rs 182 crores.

The total additional earnings due to the increases effected in coal prices last week are estimated between Rs 350 crores and Rs 380 crores this year. The industry, thus, should be able to wipe off some of its accumulated losses. A further relief has been provided to it through the grant of a moratorium for five years on the non-plan loans given to Coal India in the recent years.

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feeding inflationary fire

Although justified from the point of view of removing the structural anomaly in the prices of coal, the steep average increase allowed is bound to feed the inflationary fire. The official assessment has been that the impact on the general price level will not be more than 1.2 per cent and on the cost of living around 0.4 per cent. But both these estimates appear to be unrealistic.

According to the Coal Consumers' Association of India, the production costs of all the coal-based industries will go up significantly. The producers of steel, power, cement, fertilisers, textiles, paper, bricks, etc., will face an aggregate increase of nearly Rs 260 crores in their fuel bill. The burden on the railways will be of the order of Rs 40 crores. The increases in the production costs (per tonne) of various industries have been assessed as follows : steel Rs 72; paper Rs 108; caustic soda Rs 36; cement Rs 15; Jute Rs 17.5 and bricks Rs 9 (per thousand bricks). The power generation cost is expected to go up by no small extent.

Since the new refinery prices of petroleum products are also to be announced shortly, the increases in the transportation and fuel costs will be substantial. They, undoubtedly, will have a cascading effect and should induce the second phase of this year's inflationary tendencies. Already the first phase, which started with the presentation of this year's budget by Mr Charan Singh, has resulted in the price rise entering the double digit zone. The new government that will take office in the next few days, indeed, will have a formidable task of containing inflation.

As the Baveja committee has emphasised, there is significant scope for effecting economies in coal production costs. A major contributory factor to the unduly high costs is the excess labour force which the industry is obliged to carry on with right since nationalisation. The deterioration in industrial relations in the recent past and the setbacks caused to production because of this and such other factors as inadequacies of power and explosive supplies, the difficulties in rail transport and the unprecedented and repeated floods last year have further resulted in distorting production costs. Since industrial relations should improve following the settlement of the colliery workers' wages and service conditions dispute and the power supply situation also should take a turn for the better in the near future, every effort ought to be directed towards stepping up production and straightening out of the transport bottlenecks. Easier supply of coal even at enhanced rates can have a beneficial impact on the economy at present, for the low priority coal users have to pay a heavy price to secure supplies by road transport.

From the long-term point of view, however, a rational deployment of the excess labour force in the expansion programmes of the industry has to be effected relentlessly so that the future escalations in production costs can be contained to the extent possible.

In the interest of pushing up output, the government ought to consider the utilisation of the services of private entrepreneurs at least in the areas which are not likely to be taken up for mining by the public sector enterprises for several years.

Neyveli: a double blessing

THE INAUGURATION of the work on the second mine-cut in Neyveli for meeting the lignite requirements to the new thermal station there has brightened the prospects for securing drinking water for Madras city on an assured basis. This question should have been considered even when the first mine-cut started functioning in the early sixties. It was known that compulsory tackling of underground water for relieving the upward thrust on lignite seams after being exposed would be a regular source of water supply. The needs of Neyveli township and the existing thermal station and other industrial units constituted only a small proportion of the water pumped out daily. As it could not be visualised at that stage that water could be carried to Madras from a distance of about 200 kilometers and it was represented by farmers in the Neyveli areas using artisian and sub-artisian wells that the levels and pressure of the wells were coming down because of the pumping operation in the first mine-cut, the surplus water was drained into nearby tanks for irrigation purposes.

Veeranam scheme

The second mine-cut will also need similar pumping out arrangement. Since investigations have now been carried out about the vastness of the underground water resources to be handled and considerable experience has been gained in the mining operations, there will be no technical difficulty when getting ready this second mine-cut. The pumping operations will have to commence even earlier than regular lignite raisings as the upward thrust of the aquafers will be felt when the heavy over-burden gets reduced. It can, therefore, be expected that water in fairly large quantities will become available even within three years from now, and the pipeline for carrying water from Neyveli will have to be got ready. Fortunately, the Veeranam scheme, which had been abandoned for quite some years, has been revived. The defects in the joining of the specially designed prestressed concrete pipes will be remedied and the laying of the pipes resumed after proper technical assessment. In this manner it will be possible to 'salvage' some of the expenditure already incurred, though due to the lapse of time there has been heavy accumulation of interest charges and considerable misunderstanding about the scope and feasibility of the project.

The idea of drawing water from the Veeranam lake, the biggest in Tamil Nadu, at the tail-end of the Cauvery system, was not quite imaginatively conceived, as there is considerable difference of opinion over the availability of water resources and the advisability of drawing water at the tail-end. It is now proposed that water from Veeranam also can be drawn and joined at the pipeline at Neyveli so that total availability can be increased by 70 million gallons daily. Neyveli alone will be in a position to supply over 40 mgd as the requirements of the township and the thermal station may not be more than 5 mgd at the peak of consumption. If the output of lignite is ultimately doubled, as it is proposed to, when the second super thermal station will have a generating capacity of 1,260 MW, there will be so much additional water pumped out daily.

The World Bank has assured assistance for this project and it is, indeed, a happy prospect that the total availability can be increased to 100 mgd and the anticipated growth for some years met by this unexpected gift from Neyveli. It is remarkable that a serious underwater problem has turned out to be a blessing and it can be confidently anticipated that the tapping of this vast resource will be safely accomplished in a short period and the uncertainities attending the Veeranam project in its original form will not be there. It is learnt also that the technical feasibility of using prestressed concrete pipes with Greek assistance has been accepted and only the execution of the project with the elimination of defects has to be properly ensured.

a necessary scheme

The Krishna Water Project is, however, a necessity as it is estimated that the metropolitan area will require 250 mgd by 2001 and only the utilisation of 15 tmc ft. from the Krishna river can bridge the gap. The expenditure involved, of course will be heavy as a long distance will have to be covered. It has also not been decided whether the permitted quantity of water should be moved through an open canal system or through a pipeline. On the basis of discussions in recent months water will probably be drawn from th Somasila project after Krishna waters ar let into this project from Srisailam. It i not expected that the scheme will tak shape before the early 1990's. As there ar also proposals for linking Godavari an Krishna and grandiose schemes are bein visualised for irrigating the arid areas near Gudur, Venkatagiri and other places in Andhra Pradesh, there should be constant dialogue between experts of the two state governments with a view to harnessing fruitfully the waters of two mighty rivers over 50 per cent of total availability of which is now flowing waste.

Rural electrification in the south

RURAL ELECTRIFICATION in the southern region has been making rapid headway in the past two decades. While Kerala is the first state to achieve complete rural electrification in the country after Haryana, the pioneer in the field is Tamil Nadu. The benefits of rural electrification have been widely felt and the Tamil Nadu Electricity Board can proudly claim that over 25 per cent of power consumption is accounted for by energised pumpsets alone. The systematic use of power for agricultural operations has resulted in the energisation of pumpsets at the rate of 50,000 units annually and there were 8.55 lakh pumpsets in operation by the middle of this year constituting over 25 per cent of all pumpsets in the country. Only Maharashtra has latterly been making significant progress and about five lakh pumpsets have been energised upto now. Andhra Pradesh and Karnataka too have fared well as compared to other regions, the quota of the former being 3.55 lakh pumpsets and the latter about three lakh pumpsets. These two states have a programme for utilising underground water resources on a larger scale than in recent years as power situation will be improving and the farmers also are appreciating the advantage accruing to them through energisation of pumpsets in areas where there are no assured irrigation facilities.

The Kerala government has been making steady progress over a period in respect of villages though it is only in recent years that greater emphasis has been laid on the use of power driven pumpsets. At the end of the third Plan 68 per cent of villages had been electrified, and by the end of the fourth Plan 93 per cent. Total electrification was achieved on July 16, 1979, when the last village, Bandadka, was connected to the grid. Thus all 1268 villages according to 1971 census, are now having the benefit of power supply. It has been disputed, however, that several sections of census villages which are independent entities are not having power connections and it may not be entirely correct to say that 100 per cent rural electrification has been achieved. The state's chief engineer has explained that all revenue villages have been electrified and that power connections will be given on the basis of demands from the consumers. The dispute has arisen because of the re-classification of the villages during the last census. Prior to this census, there were over 4,400 villages in the state. The sections which have not received power supply will naturally be given greater attention as there is no difficulty in regard to the availibility of power. And, the bottleneck, if any, is in respect of structurals, aluminium conductors and the like. The state electricity board has actually a programme for giving 1.1 lakh new connections in 1979-80 besides energisation of 17,000 pumpsets.

In Tamil Nadu there are 64,198 villages and hamlets and 63,402 villages have been enjoying the benefit of electrification and the remaining 796 villages and hamlets are uninhabited or sparesly inhabited and it is expected that complete electrification can be achieved in the next few months. In view of the existence of a vast network there will be no difficulty in connecting the remaining villages with the state grid which constitutes only 1.3 per cent of the total. The state government is keen on clearing applications for power driven pumpsets as there is heavy backlog of two lakh applications even with the energisation of 50,000 pumpsets annually. The regulations relating to the certification by the appropriate groundwater authority and revenue officials have been relaxed and fresh connections may not be long delayed. It is complained, however, in some regions that there is excessive concentration of pumpsets and the water table has been going down creating problems for farmers during periods when there is

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IN THE NATION 163-169
The New Prime Minister
Coal Price Hike
Neyveli: a Double Blessing
Rural Electrification in the South
Cost of Tamil Nadu Textile Dispute
Better Prospects for Jute
WINDOW ON THE WORLD 170-173
Carter Plans for Eighties
Nuclear Power: High Priority in the UK
Dynamism in the Canadian Industry
Somoza Bows Out
SPECIAL FEATURE 174
Rural Development: Shifts in Strategy
POINT OF VIEW
Tokyo Summit Strategy on Energy—*Sudhir Sen* 181
Economics of Saffron Cultivation —*Nisar Ali* 184
TRADE WINDS 188
COMPANY AFFAIR 192
COMPANY MEETING 196
Maharashtra State Financial Corporation
RECORDS & STATISTICS 198
Wholesale Prices

no adequate recharging of water resources, due to indequate rainfall. These problems created serious difficulties for farmers during the drought of 1975 when the Coimbatore, Salem, Madurai and parts of Tirunelveli and north Arcot in the state were badly affected. Thanks to good monsoons in the past two seasons pumpsets are now being used effectively and agricultural production has been maintained at high levels, with harvesting of bumper food and cash crops.

The increasing consumption of energy for agricultural purposes has imposed severe strain on the finances of the state electricity board. Though technically the subsidy of over Rs 55 crores incurred on the supply of electricity to farmers is borne by the state governments the electricity board finances are not in a healthy state and it has not been possible to provide fully towards interest and depreciation charges and make also the required allocations to reserves. The subsidy element for agricultural purposes will tend to increase as in the next two years the one million mark may be reached in respect of power driven pumpsets.

on better ground

The Karnataka and Kerala electricity boards have of course no similar disability as there is no large thermal capacity in these regions. In fact only hydro power is being generated now and a new thermal unit may come up in Raichur only after some time. Andhra Pradesh too may have a relatively lower cost of generation as large new hydel capacity under the Nagarjunasagar and Srisailam project will be commissioned in the next two years. But these states have to make considerable progress in rural electrification in the coming years as only 55.4 per cent of villages have been electrified in Andhra Pradesh and 57.6 per cent in Karnataka. These percentages however are much higher than the all-India average of 39 per cent. While the hilly regions have their peculiar problems, several states in the plains have not made the requisite progress. The proportion of rural electrification in Uttar Pradesh is only 31.6 per cent, Bihar 27.9 per cent, West Bengal 31.4 per cent, Orissa 30.3 per cent, Madhya Pradesh 26.5 per cent and Rajasthan than 32.1 per cent. The new accent on rural electrification in the current plan period should surely be reflected in faster progress in these regions than in earlier years.

Cost of Tamil Nadu textile dispute

THE PROLONGED strike in the textile units in Tamil Nadu could come to an end only with prolonged negotiations and tough bargaining on both sides. The office-bearers of the South India Mill Owners' Association (SIMA) did not seem to be anxious to arrive at a quick settlement of the dispute because it was felt that the labour unions, as different from the rank and file, were making an effort to adopt an approach which was not in accordance with the settlement reached with textile labour in Maharashtra, Gujarat, West Bengal and Uttar Pradesh. The leaders of the labour unions in Tamil Nadu were pitching their claims high with a view mainly to embarrassing the party in power. Even though it had been acknowledged that the workers in Tamil Nadu were being paid higher than their counterparts in other regions, the claim was put forward that they should be accorded a better deal because the textile units were making fabulous profits and the productivity of workers in Tamil Nadu was higher by 25 per cent as compared to the performance in other centres.

The claims in this regard were disputed by mill managements as higher productivity, if at all, had been due to the implimentation of modernisation programmes and better maintenance of plant and machinery. Also it had been emphasised that labour was being better paid even though many mills were located in interior areas and there was no relief in the content of dearness allowance for relatively lower cost of living in some regions. Actually the point was forcefully driven home that even after giving effect to the latest settlement, the lowest paid worker in Bombay was getting only 21 paise more at Rs 481.81 per month, against his counterpart in Tamil Nadu. In Ahmedabad, the total wage for the lowest paid worker, after giving effect to the latest revisions, was even lower at Rs 472.16 per month, in Kanpur at Rs 425.99 and in West Bengal at Rs 453.35. The negotiations in the initial stages did not, therefore, make any significant progress. The millowners were offering only an increase of Rs 10 in the basic wage and were not prepared to agree to any change in the formula for computing dearness allowance as it would place the textile units in Tamil Nadu at a disadvantage with the units in other regions.

The labour leaders for their part were insisting that there should be an increase in basic wages by Rs 50 and DA to the extent of Rs 48, or Rs 98 in the total emoluments for a worker. While the wearing down process continued, the state government was in no hurry to find a solution in earlier stages as it was anxious to await the outcome of the by-election in Thanjavur. The chief minister of Tamil Nadu was also insisting that both the parties should be agreeable to any award given by him, at their requests for mediation. The DMK and the Communist parties were not inclined to accept any mediation proposal and the reference of the whole dispute to a tribunal was not liked by the radical elements who were keen on giving trouble to the chief minister.

Madurai disturbance

As the outcome of the parliamentary by-election in Thanjavur went against the DMK and the strike was unduly prolonged, labour became restive. In some mills work was even resumed on the basis of an understanding that the workers would abide by any agreement that was eventually reached between the SIMA and the labour leaders. Nearly 40 mills resumed working in the later half of June and operations were possible in many centres because mills were located in isolated areas. However, there was serious disturbance in Madurai when the management of Madura Coats made an effort to reopen the mills with loyal workers. The troubles in this centre were partly overcome and as there were signs of restiveness among workers over the loss of wages, the chief minister was eventually requested to mediate in the dispute, even though the DMK and the Communist leaders were opposed to this move.

The chief minister's task was by no means easy, but the SIMA was persuaded to agree to an increase in the basic wage by Rs 45 per month, against its proposal for Rs 40 per month. Its resistance to the revision of the DA formula was worn down and it was suggested that there should be an increase in the payment per point by one paisa to Ps 31 after the 1000-point level of the Madras city from the beginning of this year and two paise to Ps. 32 on a similar basis from the beginning of 1981. The annual increment will be two per cent instead of one per cent effective from January 1, 1979, while two days' casual leave with pay will be granted from the same date. The additional DA available under the revised formula will be Rs 5.50 and taking into account other benefits the increase in emoluments will be Rs 54 per worker per month, placing him in a definitely advantageous position over his counterparts in other regions.

Pyrrhic victory

An accord on these lines has been finally reached after the joint action committee examined the compromise proposal suggested by the state government. Regular work, therefore, has been resumed in 151 mills in Tamil Nadu, though the dispute still remains unresolved in 20 mills under the National Textiles Corporation. The rank and file is obviously dispirited as loss in wages per worker is anything up to Rs 1000, while the arrears relating to wages on the basis of new settlement will work to about Rs 250. Even assuming that the aggregate benefit will be Rs 60 per month, including fringe benefits, it will be nearly a year before the lost wages are recovered through arrears of salaries and the increase in wages in the coming months. The real advantage, therefore, accrues to the workers only from the middle of next year.

The strike lasting 54 days has, thus, resulted in a loss of wages of Rs 18.5 crores, a loss in income to the electricity board and the state government of Rs 4.5 crores each and a loss of Rs 112 crores in production. The earnings of textile units will necessarily be affected, though it is expected that some part of the loss in profits and increase in costs on account of higher electricity charges and wages will be offset by higher prices realised on sales in the next few months.

The Indian Cotton Mills Federation and South Indian Millowners' Association will have to ensure that the consumers are not unduly exploited by dealers during the period when the effects of drop in production through curbs on power consumption in Maharashtra and the labour trouble in the southern region have not been fully overcome.

Better prospects for jute

AT THE annual general meeting of the Indian Jute Mills Association, held in Calcutta on July 16 Mr K.K. Kanoria said in his presidential address that the labour situation in the industry continued to create problems in increasing production and reducing costs. He recalled that the strike by the jute workers in January and February this year had been satisfactorily settled with the offer of substantial benefits, involving an extra burden of about Rs 20 crores on the industry. It was hoped at that time that the settlement would promote peace in the industry and help to improve productivity. But Mr Kanoria regretted that many mills still faced problems, leading to industrial unrest and stoppage of work for some reason or the other. The labour leaders were resisting at the plant level the introduction of the 20th and 21st shifts in the mills. Mr Kanoria appealed to the West Bengal government and the trade union leaders to facilitate the adoption of these shifts. But, inter union rivalry being what it is, and in view of the government's reluctanee to take a firm stand, how far will it be possible for the industry to enlist the whole-hearted cooperation of labour ?

The exports of jute goods declined from 511,000 tonnes in 1977 to 400,000 tonnes in 1978, a fall of 22 per cent The drop in the foreign exchange earning was from Rs 228 crores to Rs 205 crores in this period. However, the demand for jute goods is now picking up particularly because of the shortage and high prices of synthetics.

Mr Kanoria had a valid point when he suggested that the subsidy given by the state government for installing captive generating sets should not discriminate between the existing and the new industries. While the subsidy is given at the rate of 25 per cent for new industries, it is only 15 per cent for the existing ones. Moreover, the effective date for claiming this subsidy is from October 1, 1978 for new industries and from April 1, 1979 for the existing ones. He urged the government to remove this discrimination. The state government should sympathetically consider this plea in view of the crucial importance of the industry from the point of view of export promotion and the maintenance of employment.

Mr Kanoria criticised the procedure followed by the DGS&D in buying goods from the industry. He said : "The bulk of the internal consumption is being routed through DGS&D. They are buying on behalf of Food Corporation of India and are our largest buyers. Our experience of their buying has, unfortunately, not been happy in the past. They had started off by buying from the open market by floating tenders. When the prices started increasing, they changed their system of purchases and entered into a long-term agreement with the industry at a fixed price. The agreement was arbitrarily cancelled by the DGS&D when the prices started falling and they reverted to the system of buying from the open market by floating tenders".

Mr Kanoria also pointed out that the payment to the mills for the goods procured by them was "delayed beyond proportions" and that the final payment was received by the mills only after three years. The government should see to it that its purchase policy does not create financial difficulties for the mills at a time when they need more funds for modernisation and for working purposes.

Window on the world

Carter plans for eighties

PRESIDENT CARTER proposed on July 16 an ambitious $140 billion energy programme to reduce the dependence of the United States on imported oil. The windfall profit tax on oil industry imposed recently is to be used to finance this programme. "My first priority as President is to protect the lives and the well-being of all Americans", stated Mr Carter while announcing the oil import reduction programme. "Our emergency services such as police, fire and health must be maintained. So must the essentials of food and shelter", he added. "We must have fuel to produce and to distribute food. We must have heating fuel to prevent suffering next winter in almost every part of this country, and particularly, of course, in our northern states".

In order to meet the demand for energy, the US government has drawn up a plan for action to be followed in the near future. The US administration has already taken action since April 1977 to cut the nation's projected 1990 needs for imported oil by about four million barrels per day (MMB/D). The actions announced by the president on July 16 will save an additional 4.5 MMB/D by the end of the next decade, reducing the estimated US import requirements by half. The president stated that the US would never again import more oil than it did in 1977. He also announced that import quotas for 1979 and 1980 would be set at levels below the ceilings agreed to at the Tokyo summit.

The programme the president has announced draws on each of the sources to achieve the 1990 import reduction target. It would create an Energy Security Corporation to direct the development of 2.5 MMB/D of oil substitutes from coal liquids and gases, oil shale, biomass and unconventional gas by 1990. It would establish a three-member energy mobilization board empowered to expedite permitting and construction of critical energy facilities. It will provide new incentives for the development of heavy oil resources, unconventional gas and oil shale. It will require utilities to cut current oil consumption by 50 per cent, saving 750,000 barrels of oil per day. It will establish a major new residential and commercial conservation programme designed to save 500,000 barrels of oil a day by 1990. It will provide 2,400 million dollars annually in assistance to low-income families in the US. It will also allocate a total of $16,500 million over the coming decade for improvements in the nation's mass transportation system and in automobile fuel efficiency.

Combined with the initiatives announced in the president's April 5 energy address and solar bank, the programme Mr Carter announced on July 16 would permit the US to cut its import requirements by half by 1990.

The programme obligations during 1980-1990 will involve the following funds (figures in thousands of millions, current dollars): Energy Security Corporation (88.0), $3 a barrel oil shale tax credit (1.0), 50 per cent per thousand cubic feet tax credit for unconventional natural gas (1.0), heavy oil (negligible), utility oil use reduction (5.0), residential / commercial conservation (2.0), transportation efficiency (16.5), low-income assistance (10 years) (24.2), solar bank and tax credits (20 years) (3.5).

These initiatives will be funded solely out of the Energy Security Trust Fund (ESTF), which will receive the proceeds of the windfall profits tax. Actual funding for the ESTF will depend on the final shape of the windfall profits tax and the future direction of world oil prices. Estimates for the windfall profits tax receipts range from $146,000 million up to $270,000 million over the period 1980-90, depending on oil price assumptions. Any additional funds generated from the tax will be available for additional energy expenditures or related actions. Any reduction in the receipts from these profits will require reductions in these programme levels.

The highlights of the programme are as follows:

Heavy Oil: The US has an estimated

reserve of over 10,000 million barrels of heavy oil, a highly viscous, almost tarlike crude which must be heated to be produced. Much of this reserve is in California. Heavy oils are more expensive than conventional crude oil sources both to produce and to refine, though a range of good quality refined products can be obtained from this source. The president is directing the department of Energy to decontrol heavy oil immediately. Heavy oil also would be exempt from the windfall profits tax, thus allowing it to receive the full world oil price. In addition to this price incentive, the department of Energy will take steps to assure that natural gas will be available for the production of heavy oil within the current environmental constraints.

several initiatives

Unconventional Gas Initiatives: Recognizing the extremely large potential gas resources in the US that exist in unconventional formations, such as tight sands, Devonian shale, geopressurized methane and coal seams, the president has proposed several initiatives, in addition to activities which the Energy Security Corporation can take, which will significantly accelerate large-scale production of these reserves. Through the department of Energy he will seek, for instance, action from the Federal Energy Regulatory Commission (FERC) to establish a special incentive price for natural gas from tight sands comparable to the deregulated oil price. Although the Natural Gas Policy Act deregulated other sources of unconventional gas, tight sands were not included.

Reduction of Oil Use in Utility Boilers: The US utilities currently consume 1.5 MMB/D of oil in their boilers for generation of electric power. The president is proposing legislation to Congress which would require utilities to reduce the current usage of 50 per cent by 1990. Incentives in the form of grants and/or loan guarantees would be provided to encourage utilities to invest in new non-oil fired generators, thereby retiring existing oil-fired plants earlier than would otherwise occur. This initiative covers oil burning plants which are capable of burning coal as well as those which are not. Under this programme utility oil consumption targets will be set for 1990 at half of the existing usage—750,000 barrels per day.

Residential / Commercial Conservation and Conversion: In 1978, the residential/commercial sector accounted for 37 per cent of total US energy demand, of which about one-half was consumed as oil and natural gas. Direct oil use in residential and commercial buildings, primarily for space and hot water heating, was over 3 MMB/D, and the gas use was the equivalent of an additional 3.3 MMB/D. Substantial opportunities for saving imported oil at relatively low cost can be realised through accelerated conservation investments.

Coal Liquids: The US coal reserves are the largest in the world and can supply a significant portion of its liquid fuel needs far into the future if modern technologies for the production of synthetic fuels are successfully commercialised. Processes for producing coal-derived liquid fuels may follow two broad approaches — indirect and direct processes.

newer designs

Coal Gasification: The production of fuel gas from coal was a commonly accepted technology earlier in this century before large amounts of natural gas were available to consumers. In fact, some countries still produce significant amounts of gas from coal for use in chemical processes. Although there are many different kinds of gasifiers, most commercially available designs work best with non-coking coals such as those found in western United States. Newer designs which work efficiently on eastern coals are ready for commercial demonstration.

Shale Oil: The nation's oil shale deposits, located principally under a 16,500 square mile (4.3 million hectares) area of adjoining portions of Colorado, Utah and Wyoming, represent one of the largest potential energy sources in the US. Estimated to contain more oil than Saudi Arabia — between 400,000 million to 700,000 million barrels of recoverable oil — these reserves have long been viewed as a potential source for crude oil substitutes. Production of shale liquids will probably be less costly than coal liquids, with an estimated cost of 25 dollars to 35 dollars per barrel.

Biomass: Commercial production of alcohol fuels—ethanol and methanol—from agricultural crops, residues, food and wood processing wastes via fermentation and other processes can make a contribution to the energy needs. Blended with gasoline to produce gasohal, ethanol can supplement US oil supplies as a motor fuel extender and octane improver. Production of ethanol is currently relatively expensive when compared to petroleum on a comparable BTU basis. However, the octane boosting quantities allow subsidized gasohol to compete with unleaded premium gasoline. Permanent elimination of the four-cent Federal gasoline tax on gasohol — a subsidy equivalent to 16.80 dollars per barrel—will help gasohol compete with unleaded regular grades.

Solar Bank: Legislation to establish the Solar Bank which will be transmitted to the Congress shortly, will authorise the bank to provide interest subsidies for home improvement loans and mortgages to finance the purchase and installation of approved solar energy systems. The Bank would pay upfront subsidies to banks and other leading institutions which would, in turn, permit them to make home improvement and mortgage loans for solar investments at interest rates below the prevailing market rate.

Nuclear power: high priority in UK

THE BRITISH government is to give the growth of nuclear power the priority it deserves, the Secretary of State for Energy, Mr David Howell, revealed in London last week.

Speaking at the United Kingdom Atomic Energy Authority's 25th anniversary celebrations, Mr Howell made it clear that nuclear power would play a vital role in the future.. A balanced energy policy had to have a substantial nuclear element, he said, and without atomic power there could be serious consequences for the country's standard of living.

Mr Howell continued : "The question for the future is on what scale we shall need nuclear power. Without continuing nuclear power-station orders, we shall not have a realistic policy for meeting this country's long-term energy requirements. Because of the long lead times involved in the construction of new stations, this government will give the growth of nuclear power the priority it deserves."

The UK has at present three advanced gas-cooled reactor (AGR) nuclear stations under construction, and two more have been ordered. It is also planned to build a pressurised water reactor station in the next few years, and it is hoped that its experience with two prototype fast breeder reactor stations will lead to the building of a commercial-scale demonstration fast reactor of about 1,300 MW. The latter could be a model for reactors that could contribute significantly to Britain's power needs during the early part of the next century.

Britain is devoting greater attention to nuclear power despite having large deposits of coal and oil. Its coal reserves are expected to last at least another 300 years, but the oil under the North Sea is likely to meet only the short- to medium-term needs of the next few decades.

Dynamism in Canadian industry

CANADA'S MANUFACTURING industry is concentrated to the extent of 75 per cent in the two central provinces of Ontario and Quebec so that most of the benefits of the recent surge of activity have accrued to these areas. Quebec has probably benefited the most because it has a larger preponderance of manufacturing in the non-durable sector than has Ontario. Output in volume terms in this sector has grown by 16.1 per cent since the first quarter of 1977 whereas the durable sector's gain has been to the extent of 13.8 per cent.

Growth in the industry was reflected not only in the volume of manufacturers' shipments but also in terms of price increases. The latter have varied greatly in different industrial sub-sectors. For instance, in the food area, the value of shipments has shown a rise of 37.0 per cent, while the volume of output rose just 4.3 per cent, indicating a very large price increase. On the other hand, the value of rubber and plastics shipments revealed an increase of 36.5 per cent. In volume terms, the increase was 49.2 per cent. Hence average prices dropped.

Capacity Utilization in Selected Manufacturing Industries

First Quarter 1977		First Quarter 1979	
Industries operating	Rate	Industries operating	Rate
at above 90% of capacity		**at above 90% of capacity**	
Tobacco	94 8	Rubber and Plastics	100
Printing	95.2	Textiles	100
Transportation Equipment	93.2	Knitting Mills	91.6
		Clothing	96.5
below 80% of capacity		Paper and Allied Industries	94.2
Rubber and Plastics	74.1	Printing, Publishing, etc	98.9
Leather	71.4	Machinery	94.6
Knitting Mills	74.9	Transportation Equipment	100
Wood	77.6	Non-Metallic Mineral Products	93.6
Furniture and Fixtures	73.0	Miscellaneous Manufacturing	98.7
Primary Metals	72.9	**at under 80% of capacity**	
Metal Fabricating	77.9	Wood	75.1
Electrical Products	79.4	Primary Metals	78 6
Chemicals and Chemical Products	77.0	Chemicals and Chemical Products	77.8

The price factor also played a big role in the increases in the four growth leaders, namely, leather, chemicals, wood and primary metals. At the other end of the scale, while there were fairly strong volume gains in production in printing and publishing, and in non-metallic minerals, price increases in these industries were relatively modest. Hence the increase in output was low in relation to the average.

With only the tobacco industry having a value increase of less than 20 per cent, the growth rate of all the other industries exceeded that of overall inflation (12.8 per cent as measured by the industry selling price index) by a considerable margin.

In spite of the recent rapid growth in output and capacity utilisation, there has only been a relatively modest progress in the base wage settlements in industry. The average increase in the life of the labour contract in 1978 was actually lower than in 1977 but the trend has been mildly up on a quarter-by-quarter basis, with the rate reaching 7.1 per cent in the first quarter of this year.

It, however, may be pointed out that a return to substantially higher wage increases might quickly put pressure on unit-labour costs. Productivity increases provide the basis for non-inflationary wage growth. The average increase in wages was 3½ per cent over the first eight years of the decade. In just one year in 1978 the wages have recorded a rise of over six per cent.

Profitability in Canadian industry has also been modest. Although there was an increase in manufacturing profits last year of 30 per cent, this had followed three years of essentially no increase. Furthermore, while the after-tax rate of return on equity, probably the fairest way of measuring profits, moved up last year to 13.6 per cent, this is relatively low in view of the nine per cent inflation rate. Nor is it out of line with the all-industry average which was 13.8 per cent in 1978. There is in fact some question about whether it provides sufficient incentive to manufacturers to expand production through increased investment.

In this connection it has been pointed out that the 13.6 per cent rate of return is based on assets put in place in former years when costs were much lower. Thus, in view of the sharply higher cost of construction these days, the marginal return on new investment would probably be lower for many companies than the present average rate of return.

In any case, the returns have not been

sufficient to invite a great deal of investment in recent years. Investment in manufacturing, in fact, in both 1978 and as projected for 1979 (by the Federal government's institutions), will be lower as a proportion of total investment than for any other year in the past three decades. There appears to be a cyclical pattern in the manufacturing investment and the current weak investment period seems to have lasted an inordinately long time.

The rapid change in the capacity utilisation situation by industry sub-sectors is illustrated in the table on page 172. The table shows that in the first quarter of 1977, only three manufacturing industries (out of 20 surveyed) were operating at above 90 per cent of full capacity utilization whereas nine were not even above 80 per cent. In the first quarter of 1979, however, the situation had changed radically. At that time, 10 were operating at above 90 per cent utilization—three at 100 per cent—and there were only three whose utilization rates were not up to the 80 per cent level.

Somoza bows out

General Anastasio Somoza Debayle, president of Nicaragua, resigned on July 17 and his resignation was accepted by the Congress. The speaker of the lower house, Mr Francisco Ureuyo, has been appointed his successor. The 53-year-old president Somoza had been under heavy pressure for the last few months to quit but he was trying to delay his exit in the hope that some compromise would be evolved so that the National Gaurd, his personal army, and his own Liberal Party would remain intact in this central American country, where his family ruled for over 40 years. He has also been seeking assurance that there would be no execution of his followers.

Even Mr Francisco Ureuyo was not able to bring peace to this war-torn country because the Sandinista guerrilla movement and other anti-Somoza forces were not prepared to accept an associate of the former dictator as the new president.

After nearly 24 hours Mr Ureuyo also left the country into the hands of advancing Sandinista guerrilla forces who reached Managua, the capital, on July 19. Talks later started between a five man left-wing junta and National Guard leaders on the transfer of power. A party including representatives of the five-man junta had flown to Managua from Costa Rica. The party had also included Sr. Emilio Jiminez, the Dominican Republic's Foreign minister and acting chairman of the Organisation of American States.

The guerrillas broke into the fortified presidential office in central Managua, the last stronghold of the Somoza forces. Hundreds of National Guardsmen threw down their weapons and surrendered after the guerrillas stormed their stronghold. Earlier, hundreds of guards in civilian clothes had been seen fleeing from Managua, some commendeering aircraft at Managua airport.

Two of the five members of the junta have been considered Cuban-style marxists and it is this leftist shade of the guerrilla movement which has forced the US and some other countries to support Somoza. For the same reason General Somoza had received arms from various other countries. There have been accusations by Sr. Luis Yanez of the Spanish Socialist Party to the effect that Spain has been supplying arms to the Nicaraguan regime. An official spokesman in Madrid, however, denied any recent shipment and stated that no Spanish arms had been sent to Nicaragua for 18 months. The Israeli government also has been sending arms but only recently there has been a change in its attitude as a consignment of Israeli arms bound for the Somoza regime had been ordered back on the high seas. Somoza had also been trying to enlist the help of Guatemala in order to delay the collapse of his regime. He had conferred with some Central American leaders in Guatemala about possible military assistance.

Nicaragua's economy at present is in bad shape. The country's major industries, located primarily on an eight mile stretch of the Pan American Highway near Managua, the capital, have been destroyed by the government bombings directed against the guerrillas who had camped there recently. More serious is the destruction of Nicaragua's crops. Agriculture normally provides 80 per cent of the country's foreign exchange. This year's harvest of the leading farm export, cotton, has been nearly lost, and plantings for next year's crop have been curtailed by the fighting. The picking of coffee beans, Nicaragua's second largest export, has also suffered badly.

The Costa Rican regime has been particularly anti-Somoza because in 1948 the Nicaraguan dictator's father had taken advantage of the decision to disband the Costa Rican army and had invaded a strip of northern Costa Rica, including the town of La Cruz. Having broken diplomatic relations with the Somozan regime, the Carazo government in Costa Rica has been giving very effective help to the anti-Somoza forces while maintaining an outward show of non-involvement. With the exit of Somoza now, it is possible that Costa Rica will play an important role in the resettlement of Nicaragua when the Sandinista junta members control key positions in the country.

Eastern Economist 30 Years Ago

JULY 29, 1949

Descending from the world of fancy to the more sober realm of fact, the Minister for Industry and Supply narrated a despondent tale to the Central Advisory Council for Industries which met on Wednesday and Thursday this week. The extravagant hopes of a 25 per cent increase in industrial production in the current year, over the 1947 level, which the Minister expressed only a few weeks ago, have now given place to the very modest claim that we are slightly better than the average of last year. Compared with the figures for the first half of 1948, industrial production during the last six months has made very little headway. Coal is stationary. Steel has increased by only four per cent, giving an annual rate of 886 thousand tons which is still lower than the output in 1947 of 893 thousand tons. The decline when compared with the second-half of 1948 has been marked in cotton textiles. Notwithstanding the assurances about attaining self-sufficiency in salt after a reasonable interval, salt production has shown a decline for the whole season. Jute manufacture amounted to 502 thousand tons, indicating an annual rate well below the last two years.

Special feature

Rural development: shifts in strategy

Serious attempts at rural development came to be made in India with the launching of the Community Development (CD) programme in 1952. This scheme remained in operation, with some modifications in the early sixties and later on till it was converted into an Integrated Rural Development (IRD) programme in 1976-77. In the latter years of the CD programme, some other special schemes such as the Small Farmers Development Agency (SFDA), the Drought Prone Area Programme (DPAP) and the Command Area Development Programme (CADP) too were introduced. The basic objective of all these plans was to improve the lot of the poorer sections of the rural population and to strengthen employment opportunities for them. An overwhelming emphasis, of course, was put on stepping up agricultural production —in the early stages, particularly that of foodgrains.

The CD programme was relegated to a secondary place through the passage of time: the special programmes assumed greater importance. In the middle of the current decade, it was felt that they should be integrated into an overall rural development programme with a view to catering for the needs of overall improvement in rural life. The integrated programme was streamlined last year so that concerted endeavours could be made in less dispersed areas: earlier, the efforts were diffused. Another innovation made has been that instead of providing assistance on a piece-meal basis to selected beneficiaries, the new programme aims at adopting family as a unit and enabling the family to undertake productive investment the returns on which are large enough to bring the family above the poverty-line and keep it there. The revised programme also has the objective of reaching the goal of full employment at least substantially in the blocks covered by it by the end of 1983.

The emphasis thus has been shifted from block development to block-level planning, based on the needs and resources of each area, the intention being to utilise fully all local resources through planning at the grass-roots.

The reorganised programme was put into operation with effect from April 1, 1978. Last year, it was taken up in 2,000 blocks out of the 3,000 blocks covered by the three special programmes, i.e. the SFDA, the DPAP and the CADP, and 300 blocks selected from non-special programmes. The on-going work of the three special programmes, however, continued to be funded at the 1977-78 level.

Every year 300 such blocks are to be added so as to raise the number of these blocks to 1,500 by the end of the current five year Plan.

The main efforts envisaged under the new programmes are: (i) to prepare area specific plans for full employment within a period of 10 years; (ii) to ensure people's active participation in all stages of development, i.e. from formulation to implementation; (iii) to utilise voluntary organisations of standing and repute in the formulation and implementation of block plans; (iv) to organise training for field staff at the various levels i.e. centre, state, district, taluka and village; (v) to organise field studies and support research and evaluation studies and orientation seminars in the area of development and rural employment; and (vi) to give financial support for conducting baseline surveys of households in the selected blocks.

Additional central assistance to the tune of Rs 5 lakhs per block per annum is made for the IRDP blocks under the SFDA and the CAD schemes. For the DPAP blocks, the additional allocation has been put at Rs 4 lakhs per block per annum. An allocation of Rs 2 lakhs per block outside the special programme areas was made last year with a provision that if the pace of utilisation of funds already provided justified, additional allocations would be considered. The states are required to provide adequate funds for infrastructure requirements and supporting activities.

In this piece Dr Arun K. Mukhopadhyay, deputy director, National Institute of Rural Development, Hyderabad, dwells upon the shifts that have taken place in the strategy for rural development right since the launching of the community development progremme. He cautions that since the new strategy has been launched with the same enthusiasm and concern as were found in the days of the start of the community development movement in the country, the past lessons should be borne in mind so that the concrete symptoms of erosion in enthusiasm and interest which took place in the very first decade of the implementation of the CD programme can be obviated.

THE TWO decades from 1952 to 1971 have witnessed the rise and fall of the community development (CD) movement in India.

The movement was started in 1952 on a pilot basis throughout the country with the overall objective of bringing about a socio-economic revolution on the rural front. But the reality has been that it began to demonstrate even within the first decade of its operations some concrete symptoms of erosion in motivation, enthusiasm and interest with which it was initially accepted and executed. As the community development programme provided a new experiment with human problems of development, which by itself is a difficult task to carry out sucessfully, every new scheme of development, while put into practice among a particular group of people, has to pass through the process of trial and error, and leaves lessons for us, which might impart a change either in the form or the content, or both, of the scheme.

An objective interpretation of the lessons we have learnt during the two decades of community development programme ought to be conceptually clear. To create conditions of socio-economic development, leading to a continually higher standard of living for the rural people as a whole, was the basic aim of the CD movement and local initiative and "aided self-help" were the basic methods of achieving that aim. The programme failed to achieve both these goals.

In the initial years of the first Plan, people seemed to have come forward and participated in the CD programme with their voluntary labour (shramdan). But, it soon lost its initial drive and enthusiasm, according to the report of the Community Development Evaluation Mission (1959). The people's contribution (in value) also showed a sharply declining trend from Rs 77.30 crores in the second Plan to Rs 48.87 crores in the third Plan and Rs 4.5 crores, Rs 2 crores and Rs 2 crores in the respective annual Plans of 1966-67, 1967-68 and 1968-69.

In view of the declining trend in people's participation in the programme, or its losing potential of being a people's movement, a major change was called for in it. Following the recommendations of the Mehta Committee, the panchayati raj system of local self-government was set up to institutionalise people's emotional and active involvement in the CD programme and to provide the people with opportunities and responsibilities to make decisions about their own development, particularly in the agricultural field.

> A major review of the ongoing rural development programmes was undertaken at the time of formulating the current five-year Plan. The experience revealed that a mere project approach or a sectoral approach was not adequate and that there was a clear case for making the programmes area-specific and utilising local endowments for growth with social justice and full employment. It was accordingly considered necessary to plan for integration of various programmes and establish appropriate linkages for optimal utilisation of local endowments consistent with the Plan objectives, local needs, etc. The new strategy evolved is focussed on reaching the benefits of development to the target groups comprising small and marginal farmers, landless agricultural labourers, rural artisans, tenants, share-croppers, scheduled castes and scheduled tribes, etc.

But despite the concentration of efforts on agricultural development through the national extension service as a formidable administrative apparatus and village panchayats as a vehicle of local development, the experience of agricultural production during the first decade of the CD programme did not present any bright picture of progress. The rate of growth of foodgrains production during the first Plan was 2.48 per cent—which gave an over-optimistic impression—since the rains were more favourable towards the end of this Plan. The original target under the second Plan was a 15 per cent increase (i.e. 3 per cent a year) over the five-year period, but in practice it turned out to be just 2.18 per cent a year. During this period, the imports of cereals reached an annual average of 2.5 million tonnes.

In view of the above dismal trend, the Ford Foundation Team again emphasised: "The top priority programme objective of community development in the foreseeable future must be to marshal the educational force and drive that will stimulate village cultivators to produce more food" and recommended a 'package programme' approach to agricultural problems characterised by four major innovations: (i) measures for immediate increase in agricultural production, particularly foodgrains; (ii) only those districts were to be chosen which were likely to respond most to these measures; (iii) emphasis to be directed towards profitability at the farm level; and (iv) stress on supplying the physical inputs of production.

Learning the first decade's hard lessons from the experience of failure of agriculture to meet our expectation on the food front, which were attributed to inadequate physical achievements in land development and consolidation, minor irrigation and input supply and underscored non-physical achievements in creating people's awareness of the programme, and motivating them for self-help, and extension education, and thus complying with recommendations of that Production Team for intensive cultivation in potential areas, the intensive area development programme (IADP) was evolved and started in 1960 in seven districts. It was soon extended to 16 districts—roughly one district in each major state. Subsequently, however, the principle of intensification of agriculture through the application of package of practices in areas with assured rainfall or irrigation was extended to about 1,200 community development blocks, in addition to the 300 blocks which were covered in the early stages.

The experience of the implementation of this package programme showed that the farmers were receptive to the adoption of new technology, provided the new methods were demonstrated and the benefits were properly explained to them. Second, about the same time, new high-yielding exotic strains of wheat and paddy, which responded well under the improved conditions and thereby doses of fertilisers, were evolved and introduced in India after extensive field trials. Third, the government of India adopted in the latter half of the sixties a policy of assured remunerative prices so that farmers' efforts to increase production might not be inhibited by the fear of an undue depression in prices.*

Pursuing the same intensive area development approach, a new strategy in Indian agriculture characterised by the introduction of high-yielding varieties of seeds and scientific doses of chemical fertilisers and some measure of irrigational facilities in the selected areas, was adopted since 1965-66 which mainly brought about the much-talked-about phenomenon of "green revolution", particularly in some wheat-growing states of the country. **It can be mentioned here that the target of 110 million tonnes of foodgrains (as suggested by the Ford Foundation Team in 1959) to be achieved by the end of the third Plan was actually achieved at the end of sixties.**

This is the trend in operations with tangible results already mentioned that we have experienced in the field of agricultural development under the CD programme from the first Plan to the end of the fourth Plan. But this experience imparts some striking lessons for the nation.

First, the basic conceptual trait of the programme as 'investment in men' for their all-round development was lost within the first decade of its operation. Accordingly, the schemes of social education and community organisation, which were the major means of mobilising local human resources and leadership, and changing people's outlook and motivation and creating awareness, inspiration and promoting community self-help were pushed backward during the post-stage-II when funds were reduced and activities along the human path slowed down, the Programme Evaluation Organisation Report on the subject pointed out: "In the absence of flow of funds from the centre, the burden of maintaining the community development programme proved too heavy on the state governments. **This is a point which needs careful consideration. As envisaged and hoped, the blocks had not become self-reliant in the post-stage-II period.** The problems of post-stage II blocks were found to be numerous. In some blocks, funds were inadequate for carrying out developmental activities. Since the funds from the block schematic budget were no longer available in the post-stage-II period in some blocks, the welfare activities had been completely cut down or slowed down."† This meant that a vicious circle was erected of maintaining the staff and not letting them work.

Second, the panchayati raj system of local self-government, which was expected to promote local initiative and self-help and give constructive leadership for all development activities, was not fruitful because "expectation has, by and large, not been fulfilled....the creation of an elected panchayat has not helped further the cause of community development."†† Instead of being a vehicle of change and growth panchayat bodies, in most of the cases, intensified local conflict and political rivalry and were manned by the influential, high-caste rural cities.

Actually speaking the introduction of 'IADP' and 'New Strategy' in Indian agriculture in some selected areas marked the deviation from what the community development movement stood for, that is, all-round development for all members of society. These new programmes, still considered as part of the community development programme, as the extension agencies worked for its success, gave a big push to the production of foodgrains, mainly wheat in some states, and marked a breakthrough in the long-stagnant agricultural sector in India.

This achievement, in turn, produced serious socio-economic imbalances—the problem of redistributive injustice which is ideologically contrary to our avowed goals of socialistic pattern of society. It is found that the benefits of scientific advances under the new strategy of easy supply and intensive use of chemical fertilisers, HYV seeds, insecticides, improved implements and irrigation facilities have been so unevenly distributed that income disparities among the states and regions and between big and medium privileged farmers, and small and weak farmers have been alarmingly growing. Conceived at macro level, the differences in terms of per capita income among the states have also been widening.

The inter-farm and inter-state income disparities, of course, are

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*J.S. Sarma: Presidential Address at the 33rd All-India Agricultural Economics Conference held on December 26, 1973, P4).

†PEO Report on 39 selected post-stage II blocks, 1969).

††G. Jacob, Panchayat Elections Hamper Community Development, The Statesman, Calcutta, June 19, 1968).

Integrated Rural Development Programme during 1978-79

The selection of 2,000 blocks out of the 3,000 blocks covered by the special programmes was done on the following basis: (i) the number of blocks should be allotted to each state presently covered under SFDA/DPAP/CADP more or less on a pro-rata basis; (ii) blocks having more than 20 per cent scheduled caste population should be covered first, (iii) if the data on incidence of unemployment and under-employment are available, they may be considered in selection of blocks; (iv) potentiality for development and the organisational framework that has been built up; (v) low level of agricultural productivity; and (vi) preponderance of people below the poverty-line.

The selection of the 300 blocks outside the three special programme areas was done on the following basis: (i) the states where 40 per cent of the blocks could not get covered while apportioning 2,000 blocks were allocated to eight states to bring the block coverage to 40 per cent in them; (ii) blocks having preponderance of scheduled caste population of more than 20 per cent should be given priority for selection; (iii) districts with pronounced backwardness are allocated one block each; (iv) districts which do not have any of the special programmes, are allotted one block each; (v) six union territories which did not have any allocation earlier were allotted blocks; and (vi) blocks were also to be selected from those blocks which have become operational in the old IRD areas.

State/Union Territory	No of delimited blocks(2-4-78)	No. of intensive development blocks allotted out of :				
		SFDA blocks	DPAP blocks	CAD blocks	New blocks	Total
State						
1. Andhra Pradesh	324	80	43	45	6	174
2. Assam	134	35	—	4	15	54
3. Bihar	587	142	34	128	6	310
4. Gujarat	218	52	25	19	4	100
5. Haryana	87	19	7	13	9	48
6. Himachal Pradesh	69	11	—	—	18	29
7. Jammu and Kashmir	75	28	7	3	2	40
8. Karnataka	175	40	25	20	6	91
9. Kerala	144	35	—	10	13	58
10. Madhya Pradesh	458	79	25	22	58	184
11. Maharashtra	296	71	20	25	11	127
12. Manipur	26	4	—	1	6	11
13. Meghalaya	24	7	—	—	3	10
14. Nagaland	21	13	—	—	—	13
15. Orissa	314	69	15	30	13	127
16. Punjab	117	46	—	—	10	56
17. Rajasthan	232	46	47	10	9	112
18. Sikkim	—	2	—	—	—	2
19. Tamil Nadu	375	100	30	—	31	161
20. Tripura	17	7	—	—	—	7
21. Uttar Pradesh	876	115	23	193	53	384
22. West Bengal	335	80	21	62	6	169
Union Territory						
23. A and N Islands	5	—	—	—	2	2
24. Arunachal Pradesh	48	—	—	—	10	10
25. Chandigarh	1	—	—	—	1	1
26. Dadra and Nagar Haveli	1	—	—	—	1	1
27. Delhi	5	3	—	—	—	3
28. Goa, Daman and Diu	12	7	—	—	—	7
29. Lakshadweep	5	—	—	—	2	2
30. Mizoram	20	—	—	—	5	5
31. Pondicherry	4	2	—	—	—	2
Total All India	5,005	1,093	322	585	300	2,300

not a new discovery, but the hardest lesson realised very keenly today. As long back as 22 years, the fourth Evaluation Report of PEO, Planning Commission, observed in 1957: "..there is wide disparity in the distribution of achievement and, therefore, of benefits of the programme... Within a village, it exists between cultivators and non-cultivators, and within the cultivating class, it exists as between cultivators of bigger holdings and large financial resources, and those of small holdings and less financial resources."*

In addition to this, two major striking factors relating to the conditions of rural people in particular deserve mention in this connection. First, of all rural households, small and marginal farmers constitute 52 per cent and agricultural labourers 24 per cent, **but despite the two decades of community development activities, majority of them have remained below poverty-line, i.e. below per capita minimum standard of consumption of Rs 20 per month at 1960-61 prices or Rs 37 at 1971-72 prices**. Second, whatever the benefit that community development programme has conferred on employment among the rural people, which seems to be the basic cause of majority of them remaining below the poverty-line, the situation has assumed alarming proportions. The Bhagavati Committee on unemployment has estimated that in 1971 about 18 million people were unemployed in India and a majority of them, i.e. 16.1 million, were rural people. The Dandekar-Rath estimate is that about 40 per cent of the rural people are unemployed. All this has led to the realisation for an urgent need for framing centrally-sponsored special programmes like the Small Farmers' Development Agencies (SFDA), the Marginal Farmers and Agricultural Labourers programmes (MFAL), the Drought-Prone Areas Development Programme (DPAP), the Crash Scheme for Rural Employment (CSRE), etc,—with the twin objectives of increasing production (income) and creating substantial employment opportunities throughout India. These may be considered as attempts, though related, to redress what the community development programme failed to achieve by way of removing poverty and unemployment among the weaker sections and vulnerable areas to a desirable extent.

It is now clearly understood that the community development programme was able to solve neither the problem of food production vis-a-vis agricultural development, nor that of small and marginal farmers and the landless agricultural labourers. All-India Rural Credit Review Committee in 1969 summed up the situation as follows: "It is now generally agreed that the small farmers have not benefited in proportion either to their numbers or their needs from the various programmes of rural development which have been under implementation during the three Plans, our review of record of the cooperative agency confirms that this is also broadly true in regard to availability of institutional credit for agriculture."

The failure of the CD programme in extending benefits to weaker sections and backward areas has also been attributed to the disregard of the inegalitarian socio-economic structure in the rural areas where inequality in agrarian relations is legally institutionalised, resulting in both impoverished conditions of the landless agricultural labourers and growing income disparities among the different classes in the farming community.

In short, undue emphasis on the exclusive target-oriented production strategy, excessive state patronage to and reliance on big farmers and rural institutions exploited by the powerful sections as instruments for their own sectional interests, and at the same time the lack of any effective employment-oriented facilities for the rural poor have together spoiled the whole edifice of social justice, or socialistic distribution of the means of production and the production itself, particularly in the form of foodstuffs, and thus denied the provision of cushioning against the impoverished conditions of the weaker sections in the first three Plans. On this point, Professor Dandekar has expressed his feeling in a nice way: **"The (rural poor) must wait for the promised bread which will come at the end of the 'n'th five-year Plan of over-all economic development, where 'n' is the eternal unknown."****

The approach of special programmes to the problems of poverty and unemployment among the weaker sections is new and unique and deviates from the old approach of community development in the sense that it is the first time that small and marginal farmers and agricultural labourers have been considered as vehicles of growth—a potential source of increasing crop production. It is a long delayed realisation that these farming sections can contribute substantially to the cause of agricultural production—crop and non-crop.

But the experience of the pattern of performance by the special programmes shows that they have not been able to achieve the respective targets regarding the creation of production potentialities and employment opportunities and touched only the fringe of a country-wide vast problem of poverty in the rural areas. It is doubtful that those special programmes are able to contribute much to the eradication or reduction of mass poverty by way of increasing income and creating additional job opportunities. The main obstacles experienced in the course of operations under these programmes are structural and institutional, organisational and operational. In view of the incidence of inequalities in agrarian and social structure resulting in the meagre income and in the complete lack of social power of commanding economic resources, either in the form of natural endowments or institutional support, the special arrangements for the weaker sections do not seem very much effective for their benefit. The difficulties in identifying the potentially viable small and marginal farmers and their respective problems are quite evident, for material input and financial resources meant for the small and marginal farmers are diverted to the medium and big farmers at a rate not less than 30 per cent. The unqualified reliance on institutions and organisations like cooperative credit societies, land development and commercial banks, state departments and village panchayats have not given full dividends to the weaker sections.

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*Report No. 4, April 1957, pp 12, 20).

**(Report of Seminar on Problems of Small Farmers, Indian Society of Agricultural Economics, Bombay, 1968, p. 16).

The creation of the capital-building assets and provision say, of community irrigation arrangements, which are the major prerequisites for increasing farm production by the small and marginal farmers has not made much headway and the employment-cum-production schemes for poultry, dairy, piggery, fishery, goat rearing, etc. have also not done much in view of the vast unemployment problem among marginal farmers and landless labourers.

Moreover, the short-term schemes for the mitigation of the drought conditions under the DPAP and for creating permanent employment opportunities under the CSRE have touched only the fringe of those problems and acted more as relief measures than as curative provisions for continuous improvement. The latest experiment on the line of creation of employment opportunities was Pilot Intensive Rural Employment Project (PIREP) which also could not produce any significant impact and was left unreplicated anywhere.

The experience of operations—their achievements and failures—in the special programmes suggests that the sporadic, diffused and compartmental approach to the problem of rural poverty would not achieve much in augmenting production—crop and non-crop—and incomes and creating employment in rural areas.

A comprehensive integrated rural area development approach aiming at total development was urgently needed at the level lower than the district-level. **In view of lessons learnt both from community development and special programmes performances, it has been decided to make a massive onslaught on the problem of rural poverty and rural unemployment through an integrated programme of rural development.** The integration which is sought to be achieved is in four major sections: (a) agriculture in wider sense (including animal husbandary, fishery, forestry and horticulture); (b) village and cottage industries; (c) development of the tertiary section in the various services and processing activities; and finally (d) labour mobilisation, training in skills and organised mobility to tie up labour with opportunity.

The strategy is based on micro-level planning at block level with focus on the target groups of small farmers, marginal farmers, tenants, share-croppers and rural artisans. In pursuance of this policy, 2,000 out of 3,000 blocks which are at present covered under the special programmes of the SFDA, the DPAP and Command Area Development Programme (CAD) have been selected for intensive growth. Each of these blocks is to receive an additional annual outlay of Rs 5 lakhs (Rs 4 lakhs in the case of DPAP blocks). The emphasis in all the schemes is on individual beneficiary-oriented programmes meant to subsidise the small farmers, marginal farmers and agricutural labourers in getting the institutional finance for self-employment. It is expected that the state governments will provide the additional staff and rural infrastructure out of its own resources supplemented wherever possible by other on-going programmes like the food-for-work programme. Judicious utilization of this Rs 5 lakhs is expected to assist at least 300 families in each block to go beyond the poverty-line every year. The relative low priority in infrastructure development is a recognition of the need to make maximum utilisation of the limited investment. Apart from these 2,000 blocks, another set of 300 blocks will be selected every year from areas which are not covered by any of the special programmes started earlier.

One important respect in which the new programme differs from the earlier special programmes is in its emphasis on decentralised planning and management. **Unlike the on-going special programmes, the power of approval and clearance to block level plans has been delegatad to high-powered state level committees.** The state governments have also been given the discretion to select suitable schemes not mentioned in the central guidelines with the prior concurrence of the government of India. The panchayati raj institutions and voluntary organisations of standing and repute are also to be associated in the preparation of block plans, thus, ensuring public participation of felt needs of the local people in the block plans.

Now, this new strategy, being the central approach to the rural development problems today, has been adopted with the same enthusiasm and concern as was found in the days of launching the CD movement in the country. The results are yet to be felt since the strategy is in the initial stages of implementation.

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STEP ONE : Choose the correct return form

If you are	Appropriate Return Form is
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(b) a Government employee deriving income only from salaries, interest on securities and/or other sources, e.g. dividends	Form No. 2A
(c) in receipt of income derived from property held under trust or other legal obligations for charitable or religious purposes and you claim exemption u/s 11 of the Income-tax Act	Form No. 3A
(d) not falling under any of the above categories, and	
i) you are carrying on a business or profession.	Form No. 2
ii) you are not carrying on any business or profession.	Form No. 3

STEP TWO : File the return form completely and correctly.

Give complete and correct particulars in the various parts and annexures of the return applicable to you, such as income and receipts, expenditure and outgoings, deductions and exemptions claimed. Do not forget to make appropriate and complete verification in the form. THIS IS MOST IMPORTANT.

STEP THREE : Calculate the tax payable on the total income computed by you.

After you have filled the return and arrived at the total income calculate the tax payable on such total income at the prescribed rates applicable to you. From such tax deduct any tax paid as advance tax or tax deducted at source. The balance amount is the tax payable by you as self-assessment tax. Deposit the self assessment tax in the nearest branch of any specified Nationalized Bank using.

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STEP FOUR : Attach all statements and certificates, etc. to the return.

Please ensure that the following documents are attached to the return, in so far as they are applicable to you, in support of the particulars given therein :

- i) Income and expenditure account.
- ii) Manufacturing/Trading and Profit and Loss Account.
- iii) Balance Sheets
- iv) Certificate(s) for tax deducted at source from salary and dividends etc.
- v) Receipts for payment of Life Insurance Premiums.
- vi) Chalan(s) for payment of tax on self-assessment.
- vii) Chalan(s) for payment of advance-tax.
- viii) Deposit receipts regarding the payment of Compulsory Deposit.
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davp 79/142

Tokyo summit strategy on energy

Sudhir Sen
New York

The challenge thrown by the latest oil price hike by the OPEC hastily forced the seven industrial nations to close their ranks at the Tokyo summit which was to have started on a discordant note. At the summit the leaders agreed on a two-pronged strategy—to reduce oil consumption and to speed up the development of alternate energy sources. They also agreed on ceiling on imports up to the year 1985 on country-by-country basis.

PRIOR TO his departure to attend the fifth economic summit in Tokyo, Treasury Secretary W. Michael Blumenthal summed up its agenda in three words: energy, energy, energy. French president Valery Giscard d'Estaing was no less emphatic. In an interview given to *Newsweek* a few days before the summit parley, he told the magazine's representative that "the Tokyo summit, unmistakably, will be the energy summit. It will be judged a success or a failure depending on what we decide on that subject."

The omens for the Tokyo talks looked anything but propitious. Prices of crude oil were rising relentlessly, aided by leapfrogging surcharges imposed by OPEC members vying with one another. The spot prices at Rotterdam rocketed to touch the dizzy height of $40 a barrel. Saudi Arabia's moderating stance remained on this occasion ominously equivocal. All the portents thus pointed, at the least, to a validation of the de facto increases at the price-setting OPEC session scheduled for June 26-27 in Geneva. A big leap in the crude price looked certain. The only question was its precise magnitude.

Faced with these sombre prospects, the nine Common Market countries of Europe hammered out a common energy strategy at a meeting held in Strasbourg, France (June 22). Its purpose was quite clear, namely, to restrict their own imports and, beyond that, to put pressure on the other industrial leaders, especially the USA, to do the same. The Economic Community solemly concluded that the oil shortage was not a passing, but a permanent phenomenon; that petroleum is "a scarce and diminishing world resource" and there will never again be enough of it to meet the growing demand; that it was therefore essential, for both the industrial and the developing countries, to face this long-term problem and to seek immediately conservation of oil along with development of other sources of energy. No country could achieve this effectively "alone". A worldwide agreement was considered essential.

If followed that the major consumers—Europeans, Americans and Japanese—must agree straightaway on curbing imports of oil to prevent a "cut-throat scramble" for scarce supplies, to persuade producers that their long-term interests lie in price moderation and cooperation, and also to reassure them that the consumer countries were mindful that their non-renewable resources should not be rapidly drained. The Europeans therefore decided to freeze imports at last year's level—of about 3.5 billion barrels a year—until 1985 to bring energy demand into line with supply and thereby to ease the pressure on prices, subject to the proviso that the USA and Japan agreed to do the same.

In inviting the USA to join the import freeze the Europeans gave vent to their feeling of resentment over America's "selfishness"—its failure to rein in the oil imports, which, in their view, was a major cause of today's worldwide problem. They were particularly critical of the fact that America's oil imports had risen 43 per cent since 1973 whereas the Common Market's imports had been reduced at least by 14 per cent (no doubt significantly aided by the North Sea oil) and Japan's imports had gone up only 1.5 per cent in the same period. The figures were telling, and they provided powerful ammunition for a concerted attack aimed at Mr Carter.

The common position agreed upon by the Community countries for the Tokyo parley contained three other elements: Atomic energy, for the Europeans at least, is the only medium-term solution, and without its development in the coming decades no economic growth would be possible for them. They agreed to discourage their oil companies from buying at soaring prices at the Rotterdam spot market and to persuade the US to take similar action. And they decided to ask the summit participants to open a new dialogue with the oil-exporting cartel to work out an acceptable international strategy on oil pricing.

challenge to Carter

The European energy package was, in effect, a challenge to Mr Carter and threatened to disrupt the summit. At a time when the country was hit by a shortage, with long lines of exasperated motorists waiting in their cars at gas stations for the vital fuel, he could not contemplate an immediate import freeze. Besides, after having dissuaded the oil companies from paying the soaring spot market prices, he had already reversed his position and given them the green signal to go ahead and buy freely whatever crude they could obtain to alleviate the shortage at home, and to rebuild the stocks, especially to meet the demand for home-heating oil next winter. The reversal was justified on the ground that others—especially Japan and West Germany—had been bidding up prices and buying up the limited supplies, leaving the US to bear the brunt of the overall shortage.

On nuclear energy, too, he had to move with caution, even if reluctantly, since the lid put on its further expansion following the near-disaster at the Three Mile Island was still on. Nor did he feel that the producer-consumer dialogue would serve any useful purpose, especially when the Arab members of OPEC were hiking prices and cutting supplies, partly at least in retaliation for what, in their eyes, was a grossly onesided Camp David peace.

The idea of an immediate oil-import freeze at or near its present levels was cold-shouldered by both the US and Japan, if only because it was considered inappropriate for their economies at the present moment. Besides, they were disinclined to support the Community's proposal for an overall freeze, treating the nine Common Market countries as a single entity since, for one thing, it made no mention of the expanding North Sea supplies; and, for another, it made no allowance for the widely varying needs and capacities of its individual member-countries—affluent West Germany, for example, could easily preempt a lion's share of both OPEC and North Sea oil. These misgivings were fully shared by prime minister Ohira, and so the two made a common front on the basis of some formula that would set oil import targets, country by country, for the next few years.

Just at that moment Mr Carter received another jolt, and this time from the French president Valery Giscard d'Estaing. During the *Newsweek* interview referred to above, M. Giscard was reminded of the considerable efforts France had made in the area of energy conservation and the new measures he had just announced to reinforce them. "Meantime, the Americans have not yet succeeded in reducing consumption.." The questioner could not even finish the sentence. M. Giscard stopped him short and said tartly: "They haven't started". The remark cut Mr Carter to the quick. From his immediate entourage in Tokyo came the word that the president was "deeply angry." Some labelled the Giscard remark and the whole tenor of his interview as "confrontational".

comprehensive solution

Mr Carter had time and again reiterated that he was the first American president to seek a "comprehensive solution" of the energy problem. He had gone the length of declaring energy conservation as "moral equivalent of war". And he was busy building up his record on the energy front, proudly reminding the public of his long efforts and blaming the Congress and the oil companies for his frustrations. The last thing he wanted to hear was the galling remark from the DeGaullist president of France. Yet M. Giscard's comment, however unpalatable, was incontrovertible. The 43 per cent rise in America's oil consumption since 1973 and the soaring oil import bill likely to hit $60-billion to $70-billion this year against $8 billion in 1973 testified to its validity.

The curtain was about to rise on a discordant summit when the thirteen oil ministers of OPEC, after three days of contentious debate, announced their decision which virtually confirmed the worst apprehensions. Saudi Arabia, playing the moderator's game at least on the surface, decided to raise the price of its light crude to $18 from $14.55 a barrel, and was joined by Qatar and United Arab Emirates. The other members, however, were allowed to add two-dollar surcharges on top of the usual premiums charged for quality, subject to a maximum price of $23.50 a barrel. The net effect of this decision was to raise the crude price by 50 per cent since last December when Iran began to curtail production.

wayside station

Even this may be no more than a wayside station. There may well be more surcharges and higher spot prices down the road, leading to another price hike when OPEC meets again next fall.

How unstable things are in the oil world was brought home immediately after the Tokyo summit. The media carried the news that Col. Muammer el-Qaddafi, the militant leader of Libya, had threatened to halt exports of crude oil for at least two years. It immediately sent shudders through world financial markets and stirred up fears of greater oil shortage with higher prices and more inflation since Libya exports two million barrels of high quality crude per day of which 40 per cent comes to the USA. The Qaddafi threat was later qualified, and the danger of a cut-off of Libyian oil seems to have subsided. Besides, Saudi Arabia has just indicated that it would temporarily step up its output from 8.5 million to probably 9.5 million barrels a day. Such an increase will certainly help ease the tension on the world market.

President Carter's reaction to the latest oil price increase was prompt and, because of his apparent helplessness, one of suppressed anger. He called it excessive and unwarranted. "There is no one on earth who will fail to suffer from these extraordinary increases in oil prices", he said in his public comment. It was not clear whether he counted also the OPEC countries among the "sufferers". "Lack of action over a number of years has caught up with us", he added ruefully, implicity laying the major blame on the US Congress.

Anyhow, the cartel had thrown down

the gauntlet. The seven industrial leaders assembled at the summit had to meet the challenge. It was time for unity, not discord, and so they hastily closed their ranks. M. Giscard backed off from his earlier insistence on US compliance with a six-year freeze on oil imports at current levels, and this paved the way to an agreement. The outcome was a deftly drafted communique which, in spite of its tortured look salvaged the situation and ended on a more constructive note than had seemed possible a few days earlier.

The agreements reached at the Bonn summit last summer had to be recast, the communique frankly stated, to meet the new challenges posed by higher oil prices and oil shortages which would "make inflation worse and curtail growth", the non-oil developing countries being the "biggest sufferers". The leaders agreed on a two-pronged common strategy—to reduce oil consumption urgently and to speed up the development of other energy sources.

To achieve the first objective, oil import targets have been set on a country-by-country basis. Accordingly, the European Community will restrict oil consumption in 1979 to 500 million tons (10 million barrels a day) and will maintain its oil imports between 1980 and 1985 at an annual level not higher than in 1978 while each member country's contribution to these annual levels will be appropriately specified. Canada, Japan and the US will each achieve the "adjusted import levels" to which they are already pledged in International Energy Agency for 1979 and will not exceed these import levels in 1980.

In addition, the seven countries have set "goals for a ceiling on oil imports" in 1985 as follows: For France, W. Germany, Italy and the UK—the 1978 level. For Canada—which will reduce the growth of its oil consumption to one per cent a year, thereby bringing down its daily imports of oil by 50,000 barrels, equivalent to a level of 0.6 million barrels per day. For Japan—a range between 6.3 and 6.9 million barrels a day, with the stipulation that it will do its utmost to move its imports towards lower figures.

As for the United States, it has adopted, as a goal for 1985, import levels not exceeding the levels either of 1977 or the adjusted target for 1979, i.e., 8.5 million barrels per day.

The agreement provides for periodic review by a high-level group of the results achieved. It promises to seek better information on spot market transactions and urges both oil companies and oil-exporting countries to exercise moderation in conducting them. It emphasises the importance of increasing the use of coal as a substitute for oil, also of expanding the generating capacity for nuclear power "under conditions guaranteeing our people's safety". It deplores the latest OPEC decision. but declares the readiness of the summit nations "to examine" with oil-exporting countries how "to define" supply and demand prospects on the world oil market. Other items touched in the communique include the Tokyo round of trade agreement, stability in the foreign

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exchange market, North-South relations, problem of hunger and malnutrition, and helping developing countries exploit their energy potential.

On his way back to Washington, Mr Carter hailed the Tokyo agreement as a "superb achievement". The problem now —for him and the USA—is to live with it. The Europeans, while formally yielding ground, have after all achieved their primary objective; to freeze the US oil imports at or near their present level for the next six years.

The message that came from Geneva and Tokyo is loud and clear: Oil is a diminishing resource; it must, therefore, be treated as such and be husbanded with much greater care. This means that the industrial nations must curb their oil-gluttony. A very special responsibility, therefore, devolves on the USA since, with five per cent of the world's population, it now consumes 35 per cent of the world's oil output.

Economics of saffron cultivation

Nisar Ali

The author who is a lecturer, post-graduate department of Economics, Kashmir University, has made a study of saffron cultivation in the Pampore block in Kashmir which is the only place where this crop grows. He has come to the conclusion that saffron crop has greater bias towards labour input than irrigation, fertiliser or mechanical inputs. He has also found that even though there has been a doubling of production, producivity has actually declined

KASHMIR HAS virtually a mono-crop economy with 81.36 per cent net area sown to food crops juxtaposed with small commercial farming consisting of fruit, vegetables, mushroom, mulberry and saffron. Saffron cultivation has been historically concentrated in a particular area of Pampore, at the outskirts of Srinagar. This most precious crop contributes almost 99 per cent to the total national production of saffron. However, due to paucity of data on saffron cultivation and variability of its soil chemistry one cannot construct a broad-based model envisaging thereby an optimal crop-mix of commercial crops. The present article is based on a study conducted in Pampore block, ideally suited for saffron cultivation because of its peculiar soil chemistry thus having monopoly over saffron production.

Although saffron output has more than doubled during 1966-67 to 1976-77 and acreage increased by 94.34 per cent, yet its productivity has declined from 68.05 per cent to 63.09 per cent as can be seen from Table I.

We have a time series data for 10 years, from 1967-68 to 1976-77. We have used a simple growth model of the following type: change in the saffron output per unit of time, Yt, is denoted by $\frac{\partial y_t}{\partial t}$ Or $(Y_t - Y_{t-1})$ according as t varies continuously. If $\frac{\partial y_t}{\partial t} > 0$, it refers to growth and is denoted by go (t) equal to

$$\frac{1}{Y_t} \quad \frac{\partial Y_t}{\partial t} \text{ Or } \frac{Y_t - Y_{t-1}}{Y_t} \qquad \ldots.(1)$$

Applying this simple model to the time series data (Table II) the annual growth rate of saffron output exhibits volatile fluctuations, while the acreage growth is continuous with mild fluctuations. This may be attributed to, among other things, the high probability of risk and uncertainty characteristic of this crop. Table II further reveals that saffron productivity has rather declined.

The aforesaid growth model may not give the correct picture of the trend growth rates of both acreage and output, therefore, we have fitted a few trend equations with the help of polynomial equations. A simple trend equation,

$$Y = \alpha + \beta T \ldots\ldots; \qquad (2)$$

Where $\tilde{\alpha}$ is intercept and β slope, is fitted to the actual observation of output data for 10 years which gives the following trend equation:

$$Y = -480.38 + 259.22T.$$

Owing to a wide discrepancy between the trend component and the actual observation the standard error of the estimate works out to be high. Therefore, we have fitted the Second Degree Parabola of the type:

$$Y = \alpha + \beta T + \gamma T^2 \ldots\ldots..(3)$$

where T refers to time and Y saffron output; giving the following estimated equation.

$$Y = 1216.93 + 81.42T - 18.66T^{2*}$$

Estimated correlation coefficient, being significant at one per cent level, it is obvious that area contributed significantly to the growth of output of this crop. Some of the marginal land from fallow

TABLE I

Growth of Saffron Output and Acreage During 1966-67 to 1976-77

Year	Area under saffron crop (in acres)	Output (Qts)	Productivity (percentage)	Price increase
1966-67	2965	43.51	68.05	100.00
1976-77	5763	91.35	63.09	241.11

---

*$R^2 = .32$, 't' value 4.029, significant at .001 per cent level.

land added to the increase in the acreage of this crop. Since saffron production is predominantly a function of land and labour inputs, being a mesophyte crop, it does not require regular irrigation and very little bio-chemical inputs are used. However, capital is a significant factor of saffron crop production but no secondary data is available on this input. Due to the sustained increase in its price and good climatic conditions during the last few years, more area has been diverted to this crop. Thus we have fitted the exponential function of the following type to both production and acreage to estimate the compound growth rate.

$$Y=\alpha\beta^{t} \quad ......(4)$$

where Y=saffron output in Qts

α and β=Two unknowns

t=time trend.

Reducing the aforesaid function to double log transformation for the purpose of estimation, we have

$$\text{Log } y=\alpha+\beta\log t ......(5)$$

the log linear equation yields,

$$\text{Log } Y=1.4298+0.0528t$$

$$Y=(2.690)(1.129)t^{**}$$

The result of the exponential function reveals the compound growth rate of saffron crop output at 12.9 per cent.

Similar exercises have been made for acreage. A simple linear equation for acreage index gives the following trend equation:

$$Y=84.39+4.87T,$$

while the second degree parabola yields the following estimated equations,

$$Y=888.62-410.93+8460T^2.$$

Since the standard error of the above equations is high, therefore, the exponential function gives the better fit to acreage index. Using again the exponential function of the form,

$$Y=\alpha\beta^{t}$$

and reducing the same to log linear relationship;

$$\text{Log } Y=\alpha+\beta\log t$$

Table II

The Annual Growth of Saffron Output and Acreage Alongwith Moving Average Prices During 1967-68 to 1976-77[1]

Year	Output (in Qts)	go(t)	Acreage (acres)	go(t)	Productivity (percentage)	Price per Tola*	Moving average of	
							Price**	Acreage
1967-68	43.57	—	2965	4.50	0.01	17.10	—	—
1968-69	47.98	9.19	3389	12.51	0.02	18.20	—	—
1969-70	49.07	2.22	3276	—3.45	0.01	18.35		
1970-71	40.65	—20.07	37.93	13.63	0.01	20.00	215391.20	5.63
1971-72	5.74	—608.19	3592	—5.60	—	51.00	218666.67 (1.52)	6.10 (8.35)
1972-73	108.76	94.72	4358	17.58	2.50	19.00	228673.10 (4.58)	6.25 (2.46)
1973-74	62.83	—73.10	4550	4.22	0.01	20.12	252724.55 (10.52)	6.71 (7.36)
1974-75	98.72	36.36	4837	5.93	0.02	28.10	274700.96 (8.70)	8.21 (22.35)
1975-76	107.80	8.42	5328	9.22	2.02	38.30	—	—
1976-77	91.35	—18.10	5763	7.55	0.02	58.33	—	—

*.933/80 kg **After converted into Qts.

Note Figures in parentheses are percentages.

Table III

Average Gross and Net Monetary Returns Per Acre of Saffron, Apple and Cereals in Kashmir[2]

	Per acre value for saffron (Rs)	Per acre value for apple* (Rs)	Per acre value for cereals** (Rs)
Gross value of output	4830.00	2500.00	2176.00
Net monetary return	4098.00	1250.00	1088.00
Cost of inputs for saffron		—	—
a. Bullock labour	100.00	—	—
b. Family labour	275.00	—	—
c. Hired labour	101.00	—	—
d. Seed	120.00	—	—
e. Fertiliser	—	—	—
f. Miscellaneous	136.00	—	—
Total input cost	732.00	—	—

*Directorate of Horticulture, Planning and Marketing, J&K Government.

**Input-Output Analysis of Three-tier Farms with Reference to Kashmir, (Mimeo) Nisar Ali.

**SE.=32, t value 1.32 significant at 1 per cent level.

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There is a little bit of the gambling instinct in all of us. If the stakes are high enough we are usually prepared to take a chance.

But normally we come across two kinds of people: 1. Those who prefer safe investments even if the interest rate is low; 2. Those who will go in for high-return investments in spite of a strong element of risk.

When it comes to investing of trust funds—like those of the Life Insurance Corporation—there is general agreement that the basic principle should be to earn the maximum yield consistent with safety of capital.

But even here there can be areas of disagreement. Policyholders who share the profits of the Corporation might argue that LIC's first preference should be for what are called "blue chips" on the stock exchanges and not for socially purposive investments like electricity schemes or housing schemes or schemes of water supply and sewerage with their comparatively low yields.

There are others who believe that LIC funds should not be utilised to assist or strengthen the private sector. According to them public weal should be the motto, not private profit.

It is not widely known that LIC's investible funds are so large (Rs. 738.62 crores in 1978-79) that blue chips on the stock market can absorb only a very small percentage.

It is also not widely known that there are statutory provisions requiring investment of LIC's funds in a particular manner. These have been designed to ensure maximum return consistent with safety of capital.

Detailed statutory provisions in respect of investment of life insurance funds were first introduced under Section 27A of the Insurance Act 1938, long before life insurance was nationalised. These were made applicable to LIC when it was formed in 1956. In 1970, a review committee headed by the then Governor of the Reserve Bank, Mr. S. Jagannathan, went into the matter afresh. Based on the Committee's recommendations, Section 27A of the Insurance Act was modified in April 1975. This forms the basis of LIC's investment policy today. The highlights are:

- At least 25% of annual increases in the funds of LIC should be invested in Central Government Securities.
- The next 25% should be invested in Central Government Securities, State Government Securities or other marketable approved securities (like bonds floated by Electricity Boards, etc.)
- Another 25% (which together with the first two categories would make a total of 75%) should be invested in socially oriented investments such as electricity, housing, water supply, etc.
- Of the remaining 25% the government desires that only 10% be invested in private sector, 8% for loans to policyholders, 2% for immovable property and 5% for miscellaneous items (outstanding premiums, furniture and fixtures, sundry debtors, etc.).

Those who criticise this investment policy as not in the interest of policyholders from the point of view of high yield would do well to remember two things:

1. The socially purposive investments in electricity schemes, housing, water supply and sewerage, etc., are directly benefiting policyholders. Upto 1978 the number of houses either constructed or being constructed with the help of LIC funds was over nine lakhs. Similarly, more than 50% of India's urban population has benefited from funds made available by LIC to municipal water supply and sewerage schemes. Also, think of the jobs created with the help of Rs. 663 crores of investment from LIC in the energy sector.

2. The investment policy has been safe, and the yield has gone up steadily over the years, as the following table will show:

Year	Gross yield
1956-57	3.74%
1966-67	5.76%
1976-77	7.57%

LIC's investments as at 31.3.1979 (provisional) were as follows:

Category	Rs. crores
Government securities and other approved securities	2372.04
Loans for housing development	655.26*
Loans to State Electricity Boards	663.05
Loans for water supply and sewerage schemes	242.29
Loans to Sugar Co-op Societies	25.60
Loans for setting up industrial estates	10.03
Shares and debentures of companies	413.20
Loans to companies	134.28
Investments in foreign countries	32.76**
House property and land	60.68**
Miscellaneous	104.50**

*This excludes mortgage loans of 1978-79

**as at 31.3.1978

Policyholders are often amazed and happy to learn that major development projects have been made possible by the small sums of money they send in as premiums—with no great capital risk or profit erosion for themselves, thanks to a well-thought-out investment policy.

CC-13

yields the following estimated equation:

$$\text{Log } Y = 1.9372 + 0.0187^{t} \ *$$

$$Y = (8.6537)(1.044)^{t} \ .$$

Thus the exponential function fitted to the acreage index shows that the compound growth rate of area under saffron stands at 4.40 per cent.

Saffron crop, being a precious commercial crop, appears to be significantly responsive to price changes. The saffron price during the period under study has risen by two and a half times. Since the saffron output is beyond the farmer's control in view of its high probability of risk and uncertainty, we are taking acreage as decision variable. Moreover, acreage is the main input for the saffron crop, therefore, it is a better decision variable. Thus we have

$$A_t = f\,(P_{t-1})$$

Where At is the acreage at time t

P_{t-1} is the preceding price.

From Table II it is clear that while the price per tola of saffron went up from Rs 20 in 1970-71 to Rs 51 in 1972-73, the corresponding acreage under this crop increased to 4358 acres (t+1). However, both price and acreage exhibit fluctuations but we have smoothed out the volatility of fluctuations by using Moving Average (2 year) of Moving Average 5 year in the following way:

t	Yt	Moving Average (2 year) of Moving Average 5 year.
1	Y1	$\frac{1}{2}\left\{\frac{1}{5}(Y1+Y2+Y3+Y4+Y5)+\frac{1}{5}(Y2+Y3+Y4+Y5+Y6)\right\}$
2	Y2	$\frac{1}{2}\left\{\frac{1}{5}(Y2+Y3+Y4+Y5+Y6)+\frac{1}{5}(Y3+Y4+Y5+Y6+Y7)\right\}$
3	Y3	$\frac{1}{2}\left\{\frac{1}{5}(Y3+Y4+Y5+Y6+Y7)+\frac{1}{5}(Y4+Y5+Y6+Y7+Y8)\right\}$
n	n	

Table II reveals that along with the increase in saffron price, the area under this crop has consistently increased. But while taking the price percentages of moving average price, the price response is not highly significant. While the moving average price has increased 1.52 per cent the acreage has increased by 8.35 per cent. The decrease in moving average price from 10.52 per cent to 8.70 per cent has caused acreage to increase from 7.30 per cent to 22.35 per cent. From these relativities it is clear that saffron price is not a very significant factor, as it appears to be, in determining the saffron acreage. It is the risk and uncertainty element which is the most significant factor to determine saffron acreage among its factors of production. Although saffron prices have increased 2½ times, yet the compound growth rate of acreage under this crop during the period under study has been only 4.40 per cent.

On the basis of this study, saffron crop seems to have greater bias towards the use of labour input than irrigation, fertiliser and other mechanical inputs. It is subject to assured rains during April and October, failing which the growth of the crop output is adversely affected as happened in 1971-72. It requires resources at the sowing time and the returns spread over 10 years on average. Table III shows that labour input accounts for 65.03 per cent of the total cost of saffron per acre. The net monetary returns per acre are much higher than any other crop. The results of sample survey can easily be compared with the cost of cultivation of fruit and cereals. The high cost of apple cultivation has rendered the farms of small orchardists less remunerative and in many cases unremunerative. If we compare this figure with the estimates prepared by the directorate of Horticulture, Jammu and Kashmir, the net return per acre of apple farms is only Rs 1225.00. In many cases the small cereal farms are more remunerative than the small apple farms.[3] On the basis of relative costs and returns (Table IV) the saffron crop appears to be the king crop in the valley. It however needs to be noted that non-saffron acreages cannot be converted into saffron acreages owing to soil constraints. Small and large saffron farms are more efficient than the medium size farms.

TABLE IV

Ratio of Relative Returns Per Acre of Saffron, Apple and Cereal Farms in Kashmir

(In Rs)

a.	Saffron-apple	3.28
b.	Saffron-cereal	1.37
c.	Cereal-apple	2.40

Notes and References

1. Data on area and production obtained from BDO's office, Pampore Block.
2. 'Input-Output Analysis of Three-Tier Farms with reference to Kashmir'; Nisar Ali (Forthcoming Mimeo, Deptt of Economics, University of Kashmir).
3. Ibid.

Note: Tola is .933/80 kg. 80 tolas=.933 kg.
Usual sale measurement for saffron.
Boumal, WJ Economic Dynamics.

Eastern Economist

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TRADE WINDS

Export Prospects to Spain

ELECTRONIC COMPONENTS, selected items in the automobile ancillaries and scientific instruments for laboratory use have considerable export potential in Spain. Wooden furniture has little market for India but decorative pieces can hope to sell. This assessment is contained in a report of the market survey in Spain conducted by the Trade Development Authority (TDA). Four products were selected for the market survey namely, electronics and its components, auto ancillaries, scientific instruments and wooden furniture. Their export potential was assessed by the market survey team since these are imported by Spain in considerable quantities.

The survey team also studied the export potential of three other products, namely, readymade garments, small and hand tools and industrial fasteners, products in which Spain is competing with India. According to the survey report, Indian manufacturers can hope to export these three products to complement availability. According to the TDA report, Spain imports consumer electronics as well as electronic components. Import of electronics comes under the restricted category of imports subject to quality restrictions. There are, however, no quantitative import restrictions in the case of electronic components. Major items like TV tubes, semi conductors, condensors, inductive components, relays, circuit breakers and electro acoustic components, have a good scope in the Spanish market. Indian manufacturers have already entered the Spanish market for electronic components. Spanish buyers are stated to be satisfied with Indian deliveries and quality. There is ample scope to increase Indian share in the Spanish market.

Export of Cast Iron

A contact promotion programme for boosting the exports of Indian cast iron vices, clamps and hardware in the American and Canadian markets has been undertaken by the Trade Development Authority. Under this, a six-member team will study in detail the market requirements of all types of vices and hardwares in these countries. A senior TDA officer, who is the leader of the team, has left for the United States recently. He will be joined after four weeks by five industry representatives.

The contact promotion programme will not only furnish market information but will also provide live contacts to the Indian industry for marketing their products. The programme will identify appropriate marketing channels and recommend a marketing strategy for promoting these products. It will also provide accurate data to narrow down the specific areas and products in which there is considerable export potential in the US and Canada. Models and designs that need to be introduced, the size ranges to be offered and packaging requirements will be outlined. Although Indian exports of cast iron vices and clamps has shown a phenomenal increase of 512 per cent and 7757 per cent from 1974 to 1976 to Canada and the USA respectively, these are only a small fraction of the total imports to these giant markets.

Award for Metal Box India

The CLIO gold statue of New York—the world's most coveted award for excellence in package design—has this year again been awarded to Metal Box India, for the third year in succession. It is indicated that Metal Box India is the only company in the world to receive this award three years running, a record for Indian packaging. This year the CLIO has been awarded to an item designed and produced by Metal Box India for Duncans Agro Industries Limited, Calcutta.

Rise in Hotel Accommodation

Hotel capacity in the country has recorded substantial expansion over the last five years, according to an official release. During this period, 137 new hotels of international standards, with a total capacity of 8,453 rooms, were added to the list of approved hotels. As a result of this expansion, there were 313 hotels with a total capacity of 18,751 rooms by the end of April 1979.

The hotel accommodation available in the four metropolitan cities shows that Delhi has 29 hotels with 3,065 rooms, Bombay has 40 hotels with 3,457 rooms, Calcutta has 12 hotels with 1,172 rooms and Madras has 27 hotels with 2,056 rooms. In addition, there are 75 hotel projects at various stages of construction throughout the country. When commissioned, they together will add 4,632 rooms to the existing capacity.

The Indian Tourism Development Corporation (ITDC) proposes to construct hotels at New Delhi, Chandigarh, Gauhati, Gulmarg, Pondicherry, Goa, Bombay, Ahmedabad, Bhopal, Gwalior, Puri and five other centres to be selected during the next five years. When these hotels are completed, an additional accommodation of 1,475 rooms will become available.

Concorde Saves Fuel

The Concorde jetliner may be pioneering a fuel-saving technique that will eventually save the world millions of gallons of precious aviation fuel. A British Airways pilot, Mr William Lowe, has won a £5,000 staff award for devising a way in which the supersonic jetliner can save 2,000 kilogrammes of fuel on every trans-atlantic flight. On a typical flight across the Atlantic, it uses some 20,000 kilogrammes of kerosene. Mr Lowe has proved that this fuel-saving can be achieved by using the Concorde's advanced computerised inertial navigation systems to plot and control the plane's speed, height and course on its approach to London's Heathrow airport.

Normally as the four-jet delta-winged aircraft approaches the UK mainland it starts to decelerate and make its descent under the direction of air traffic radar control. The pilot is advised as to what adjustments should be made to the plane's height and speed as it takes its place in the arrival circuit. Often planes have to circle in what is known as a stack as they await their turn to land.

Solar Power Station in Australia

Australia's first high-temperature solar power station is to be built at a small cutback town by a team of scientists from the Australian National University (ANU). The prototype station will provide electricity for 10 or more houses. The waste heat will later be used for hot water, space heating, desalination and, possibly, air-conditioning. Commissioned by the New South Wales (NSW) state government, the project will cost $A800,000. The power plant will be built at a remote town in the far west of the state.

The NSW government has not yet named the town, but it will have a population of about 50 and now obtains its electrical power from diesel generators. Professor Stephen Kaneff, head of the department of Engineering Physics within the ANU's School of Physical Sciences, said the plant would provide a much cheaper supply of electricity to towns which now used oil for power generation. The design of the solar station will be based on research carried out during the past six years by the department's energy conversion group.

Lightweight Tractor

A new lightweight tractor which is said to weigh only half as much as a conventional tractor with comparable performance characteristics has been devised by Mr Sixten Larsson of Uppsala in Sweden. Series-production has already started up at the plant of AB Uppsala Traktorproduktion. Launched under the name Comtrac, the new machine has an overall length of 2.27 metres, a height of 2.33 metres and a total weight of only 1.51 tons. It is equipped with both hydraulic and mechanic power take-offs and standard accessories—buckets, blades, etc.,—can be used. Its hydraulic loader has a reach of 2.3 metres and a capacity of 600 kg. The Comtrac is powered by a 51 HP diesel engine.

An innovatory feature is the tractor's vibration-free rear axle, which is of patented design. This is said greatly to reduce the loss of grip occasioned by vibrations and to avert damage to lawns, soil, etc., caused by skids. With its great tractive power and compact size, the Comtrac is particularly suited for such

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THE DELHI CLOTH & GENERAL MILLS CO. LTD.

NOTICE

It is hereby notified for the information of the public that The Delhi Cloth & General Mills Co. Ltd. proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval for the establishment of a new undertaking for rendering services of hoteliers. The turnover is expected to be Rs. 18 crores. Other particulars of the proposed new undertaking are as under :

1. Name of the proposed undertaking	D.C.M. Hotels Ltd.
2. Name(s) of persons of authority/ authorities proposing to establish the new undertaking. Where it is a body corporate, furnish details of its management structure together with those of the proposed undertaking.	The Delhi Cloth & General Mills Co. Ltd., Delhi. It is managed by Managing Directors. The new undertaking will be managed by a Managing Director.

3. Capital structure of the applicant person or authority and of the proposed undertaking.

	(Rs. in Crores) Applicant	(Rs. in Crores) Proposed Undertaking
Authorised	50.00	15.00
Issued, Subscribed and Paid-up:		
Preference	2.17	7.2
Equity	17.40	
Total	19.57	

4. Proposed location of the new undertaking.	NEW DELHI
5. Brief outlines of the cost of the project, the scheme and source of finance.	The estimated capital outlay is Rs. 18 crores which is proposed to be financed by share capital and long term loans.

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

Dated this day of
19th July, 1979

Sd/-
(S. RATNAM)
Executive Director

pplications as snow clearing, work in parks and recreation centres, etc. The driver's cabin features flat floor, good visibility and low noise levels.

Diecasting Technology

Indian Lead Zinc Information Centre is organising two seminars on "Gating of Diecasting Dies and Diecasting Technology" at Madras and Bombay in August 1979. These seminars will be conducted by Mr P. Thukkaram, president, Metalmasters Inc of USA.

Assistance for the Developing World

The total net inflow of resources into developing countries from all sources in 1978 is estimated at $77 billion as against $65 billion in 1977. According to data released by the Organisation for Economic Cooperation and Development, (OECD) the flow of resources from industrial countries stood at $57 billion—an increase of $7 billion over the level of 1977.

Official Development Assistance (ODA) which is given on concessional terms increased by $3.6 billion to $18.3 billion. The developed countries collectively contributed 0.32 per cent of their GNP as compared to 0.31 per cent in 1977. The UN aid target is 0.70 per cent of GNP. The year 1978 saw a further increase in international bank lending to a new high of $24 billion as against $18 billion in 1977.

The flow of resources from the Organisation of Petroleum Exporting Countries (OPEC) was estimated at $6.6 billion as against $ 7.6 billion. This was because of smaller aid disbursements to Egypt and reduction in the flow of aid from Iran.

Denmark achieved, for the first time in 1978, the UN target of 0.7 per cent of GNP for aid by developed countries West Germany, Japan and the United States, whose contributions had stagnated or fallen in 1977, increased their ODA in 1978 both as a share of GNP and in real terms.

West Germany's ODA increased from 0.27 per cent in 1977 to 0.31 per cent in 1978. Its disbursement of ODA amounted to $ 1,984 million in 1978 as against $ 1,386 million in 1977. The US, which has made no commitment to implement the UN target of 0.70 per cent, accounted for only 0.23 per cent of GNP as its share of ODA which was of the order of $4.8 billion in 1978. In absolute terms this figure represented an increase of $ 700 million over 1977.

Japan increased its ODA to $2,215 millon from $1,424 million in 1977 and as a share of GNP it was marginally higher at 0.23 per cent. Among the major industrial countries. France was leading in ODA with 0.57 per cent, followed by Canada 0.52 per cent and the UK 0.40 per cent. The countries which have already exceeded the target include Sweden, Norway, Netherlands and Denmark.

Aid for Family Welfare

India is likely to get financial assistance to the tune of $ 80 to 100 million from 1980 to 1984 from the United Nations Funds for Population Activities (UNFPA).

This information was made available at a meeting of an eight-member parliamentary delegation from Austria with Health and Family Welfare secretary, Mr Rajeshwar Prasad. Forty million dollars have already been provided to India for the period 1974-79. In addition to the 80 to 100 million dollars, UNFPA would also assist India in what was called the "special area programme" for the development of infrastructure in six districts of Bihar and three in Rajasthan. The delegation is sponsored by the UNFPA from the donor nations to the population control activities being carried on in the countries benefiting from UNFPA assistance.

Large-capacity Electric Van

Together with M.A.N. the Austrian firm O.A.F.—Graf und Stift AG have developed a new electric van for use by the Austrian post office. Of double the efficiency of its predecessor, this parcels delivery van has a paylood of 16 m^3 (565 ft^3), a top speed of 53 kph (33 mph) and a climbing ability of 1 in 5. Fully charged, the battery will take the truck a distance of 90 km (56 miles).

IDA Credit for ARDC

A project designed to expand institutional credit to farmers for increasing food production in India will be assisted by a credit of $250 million from the International Development Association (IDA), an affiliate of the World Bank. The proceeds of the credit will be channelled through the Agricultural Refinance and Development Corporation (ARDC) to cooperative and commercial banks for lending to farmers. The project will support a two-year (1979-81) lending programme of ARDC mainly fot minor irrigation (including land development), plantation, horticulture, livestock and fisheries. It also includes an intensive training programme primarily for the staff of land development banks and provision of equipment to state groundwater organisations, state land development banks and ARDC to enable them to more effectively implement groundwater resource evaluations.

The main economic benefit from the project would be increased agricultusal production. At full development in 1986, the annual value of increased agricultural production is estimated at about $ 825 million. The project is also expected to generate 115 million man-days of additional employment each year.

The IDA credit to India is for a term of 50 years, including 10 years of grace. It will be interest free, except for a

The
Gwalior Rayon Silk Mfg, (Wvg.) Co. Ltd.
Regd. Office: Birlagram
Nagda, (M.P.)

NOTICE

NOTICE is hereby given that for the purpose of the proposed rights issue, the Company has fixed Friday, the 10th August, 1979 as the "Record Date", in consultation with the Stock Exchanges and the equity shareholders of the Company, who are individuals and whose names stand on the Register of Members of the Company as on the close of Friday, the 10th August 1979, will be entitled, subject to the terms and conditions stipulated in that]behalf by the Controller of Capital Issues, to the allotment of right equity shares of Rs 10 each at a premium of Rs 25 per share, on the basis of 3 new equity shares for every 25 equity shares held by them (subject to a maximum of 200 shares to each individual shareholder).

By Order of the Board,
B.N. PURANMALKA
Secretary

Birlagram, Nagda
Dated : 18-7-1979

service charge of 3/4 of 1 per cent per annum to meet IDAs administrative costs.

Study on Agricultural Credit in Orissa

The Reserve Bank has constituted a study team to examine the factors inhibiting the growth of agricultural credit institutions in Orissa and to suggest measures to bring about the desired improvement in their working so as to enable them to lend adequate support of agricultural programmes in the state. The executive director incharge of the Agricultural Credit department will be its chairman. The other members include representatives of the government of Orissa, government of India and the Reserve Bank. The main terms of reference of the team include the examination of the financial position and operational efficiency of the state and central cooperative banks which may include an examination of lending policies and procedures relating to production, investment and also consumption credit, arrangements for supervision over the affiliated institutions.

It will suggest supplementary institutional arrangements in case the institutions at the base or intermediate levels of the cooperative credit structure are unable to lend adequate credit support to agriculture and allied activities.

International Transport Show

The International Transport Exhibition, the largest of its kind ever held in the world, was opened in Hamburg recently. The purpose of this huge exhibition is to outline the development of transport systems on land, water, rail and in the air up to and beyond the year 2000. Apart from weapons and armaments technology no other technological area has developed as rapidly as transport. The electric train is now 100 years old. A hundred years ago people regarded it merely as an attraction at an exhibition.

The hovertrain's driver throws a switch at the control panel and the carriage starts to buzz gently, accompanied by barely perceptible vibration. The 36-ton railcar takes off from its monorail and hovers on a magnetic cushion ten millimetres, or two-fifths of an inch, above the track. It is the train without wheels, the sensation of the Hamburg International Transport Exhibition, the Transrapid 05 hovertrain. The prototype hovertrain seats 68 in comfort and is powered by a relatively modest linear motor that has no moving parts and is thus not subject to wear and tear.

Plovdiv International Fair

The first Plovdiv fair was organized in 1892, and since 1936 it has been held annually as an international trade fair. At present the Plovdiv Fair occupies an area of 510,000 sq. m. with 170,000 sq. m. of exhibition space, including 5,000 sq. m. of water areas. The Plovdiv Fair is referred to as a window display of the possibilities of Bulgarian industry and agriculture, of Bulgaria's participation in international economic cooperation. Over 2,000 Bulgarian economic organizations and industrial enterprises exhibited at the 1978 Plaovdiv Fair in 14 pavilions over a total area of 83,000 sq. m.

In 1978 more than 2,300 firms from 46 countries exhibited over a total area of 85,000 sq.m. The USSR alone exhibited over 12,000 sq. m., the FRG over J,000 sq. m., the GDR over 6,000 sq. m, Poland over 5,000 sq. m, Austria, Czechoslovakia, Yugoslavia, the USA, Italy, Hungary and other countries had pavilions with an area exceeding 2,000 sq. m.

Among the participants in this fair were firms of world renown such as Daimler-Benz, Phillips, Renault, Skoda, Bosch, IBM, Shell Oil International and FIAT. What is characteristic of this fair is the growing participation of the developing countries, nineteen of which were represented at last year's fair : Iraq, Algeria, Ethiopia, The People's Democratic Republic of Yemen, Cyprus, Indonesia, Nigeria, Argentina and Brazil, among others.

The large number of participants from Bulgaria and other countries and the great variety of exhibits have created favourable opportunities for active business contacts. In 1978 the Bulgarian foreign trade enterprises signed contracts for export and import to the tune of $ 3,400 million exceeding one-fifth of the country's overall trade exchange. The business contacts established at the Plovdiv Fair are illustrated by the agreements signed by Bulgarian enterprises and also many foreign contracting agents concluded similar deals with each other. This particularly refers to the developing countries and the firms from the advanced industrial states, afforded wide opportunities at the fair to familiarize themselves with the products of the member-countries of the Council for Mutual Economic Assistance. Foreign specialists in trade fairs and journalists are fully justified in placing the Plovdiv Fair among the top ten international fairs in the world.

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CORPORATION LIMITED

(A Government of India Enterprise)

MATERIALS MANAGEMENT
DIVISION

DISPOSAL SECTION/HQ.
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Intending tenderers may see the above materials at sites, during working hours on working day. Tender paper may be had from the office of M (Mat. & FPS) HQ. on payment of Rs. 10/- (non refundable) payable to M/s. Heavy Engineering Corporation Ltd., Ranchi-4 by crossed postal order only from 28-7-79 to 13-8-79. Sealed quotation will be received in Ranchi upto 3 P.M. on 17-8-79 and will be opened on the same day at 3.15 P.M. in presence of attending tenderers. Tenderers may obtain tender paper well in advance so as to reach this office within the stipulated period. The Corporation will not be held responsible for any postal delay. Tenders should be accompanied with an earnest money @2% of the quoted amount in the form of demand draft in favour of Heavy Engineering Corporation Ltd, Ranchi-4 or in cash receipted by Chief Cashier/HQ. HECL.

MANAGER (MAT.&FPS)HQ

davp 763(66)79

COMPANY AFFAIRS

Birla Jute

THE BIRLA Jute Manufacturing Company has recommended a dividend of 10 per cent for 1978-79 on the doubled equity capital—after the issue of bonus shares in the ratio of one for one—as against the equity dividend of 20 per cent for the previous year.

The gross profit for the year amounts to Rs 932 lakhs (Rs 843.5 lakhs). Taxation claims Rs 310 lakhs (Rs 240 lakhs), while the proposed dividend will absorb Rs 88.72 lakhs (same).

Talking to newsmen in Calcutta, Mr J.R. Birla, director in charge, has said that the growing deterioration in the supply of power, coal and railway wagons as also the prolonged jute strike has affected the company's output, especially of jute goods and cement. In the circumstances, it is notable that the company has been able to achieve better results than the previous year. Despite loss of production, the jute mills division has earned more because of improved market conditions. The profitability of the cement division has been affected by the fall in output, although this division continues to contribute the bulk of the company's profits.

Although there is a decline in production and export by the jute mills division, the profitability has improved due to better demand both in India and abroad. Because of a rise in the price of oil, the price of synthetic stuff which had posed a threat to the jute material has risen and the price gap is no longer that big. Mr G.P. Ghosh noted jute expert, has said that Bangladesh has also revised its marketing strategy and no longer bases it on underselling the Indian product. In some cases, their prices are now higher than that of India. Besides, their production has also fallen a little.

Cement Division

Mr Birla has said in view of the rapidly increasing demand for cement the company is going ahead with its scheme to expand the capacity of the Satna Cement Works by an additional 800,000 tonnes per annum as against the present installed capacity of 5.81 lakh tonnes. It is proposed to set up a 2,500-tonne per day dry process plant, designed by a Danish firm. The plant is likely to be commissioned during the latter half of 1981 at a cost of Rs 35 crores. The company is also renovating the existing cement plant at Satna to improve productivity. It is also proposed to instal a fourth cement mill at Durgapur Cement Works so as to increase its production to 600,000 tonnes.

The working of the staple fibre and the calcium carbide divisions reflected significant improvements during the year. But for the erratic power supply the position at the carbide division would have been still better.

Digvijaya Woollen Mills

The directors of Shree Digvijaya Woollen Mills Ltd, popularly known as "DIGJAM" have recommended to maintain dividend for the year ended March 31, 1979 at 25 per cent on equity shares and 8.57 per cent on preference shares as in the previous two years.

After making provision for bonus and gratuity the year's working shows a gross surplus of Rs 188.07 lakhs (previous year Rs 124.14 lakhs). Depreciation gets Rs 39.06 lakhs (Rs 28.88 lakhs), investment allowance reserve Rs 11.66 lakhs (Rs 26.55 lakhs) and provision for taxation is made at Rs 69.00 lakhs (Rs 33.00 lakhs). Proposed dividend will amount to Rs 22.69 lakhs (Rs 22.69 lakhs) and Rs 45.65 lakhs (Rs 13.02 lakhs) will be transferred to general reserve.

Compared to the previous year the production was higher and sales turnover also increased from Rs 7.92 crores to Rs 8.81 crores, commensurate with the level of production resulting in lower carry over of finished stock at they end of the year. Although the raw material prices were stable during the year, there was an escalation in costs of dyes and chemicals, power and fuel and higher incidence of excise duties. However, the all round improvements made by the company in productivity and product mix, helped it in achieving the improved results.

Despite the continued recession in demand, the company was able to maintain its tempo of exports during the year under review. Goods worth Rs 23.57 lakhs were exported. Bulk of these exports went to highly sophisticated markets such as the UK and Canada. The company hopes that its exports will improve further during the current year.

The company is going ahead with implementation of the programme of modernisation and renovation of the plant and equipment in its drawing, spinning, weaving and finishing departments. The overall cost of the project is expected to be about Rs 300 lakhs which will be met partly by loan from ICICI and deferred payment credits, under IDBI scheme, and partly out of the company's internally generated funds. The installation of new machinery will help the company to improve the quality and range of products, thus enhancing its competitive position in domestic and export markets.

Zenith Steel Pipes

The directors of Zenith Steel Pipes and Industries Ltd have recommended a 15 per cent dividend for the year ended April 30, 1979. This will absorb Rs 47.25 lakhs (Rs 37.80 lakhs) and a part of it is expected to be tax-free in the hands of the shareholders under Section 80K of the Income-Tax Act. The company is making an application to the Income-Tax deparment to determine the percentage of the tax exempted dividend. The share copital in the previous year was Rs 2.52 crores against the present amount of Rs 3.15 crores on account of the issue of bonus shares in the ratio of one for every four equity shares held. For the year, the turnover is Rs 32.86 crores (Rs 30.19 crores).

After meeting the charges of

depreciation at Rs 32.30 lakh (Rs 22.50 lakh), investment allowance reserve Rs 31.37 lakh (Rs 8.80 lakh) and taxes Rs 58.50 lakh (Rs 50 lakh) the profit has been placed at Rs 77.30 lakh (Rs 96.52 lakh). With the addition of Rs 8.58 lakh (Rs 7.28 lakh) on account of excess of provisions for earlier years and Rs 25.72 lakh (Rs 72.04 lakh) brought forward from the previons year, the available surplus is Rs 1.12 crores (Rs 1.05 crores). Of this surplus, the directors have proposed to transfer Rs 39 lakhs (Rs 41 lakhs) to general reserve, leaving a balance of Rs 25.35 lakhs (Rs 25.72 lakhs) to be carried forward.

New Standard Engineering

The board of directors of New Standard Engineering has recommended issue of bonus shares in the proportion of one such share for every three equity shares held, besides maintenance of dividend at 14 per cent. Turnover has improved by 14 per cent to Rs 9.69 crore from Rs 8.50 crore in the previous year and gross profit is up by 22 per cent to Rs 1.12 crore from Rs 91.94 lakh. After providing Rs 29 lakh for depreciation and investment allowance reserve and Rs 45 lakh for taxation, net profit is Rs 38.08 lakh compared to the previous year's Rs 30.02 lakh. The company's order booking was satisfactory and orders on hand amount to Rs 18 crore.

Indian Hotels

Having successfully commissioned the Delhi Taj Hotel, Indian Hotels Company is directing its development strategy at accelerating the completion of other projects such as the construction of Benaras Hotel the transformation of the West End Hotel, Bangalore, into a resort hotel and at generally enlarging the Taj chain of hotels in India and abroad.

The company has under consideration a project for the construction of another hotel in Bombay where a severe shortage of rooms continues. The company has also received proposals for providing operating and management services to hotels in foreign countries. The Indian hotel industry, according to the chairman, Mr J.R.D. Tata, is recognised in the hotel world as having developed management expertise of the highest international standards.

During the year ended March 1979, IHC's total income rose from Rs 13.92 crores to Rs 18.43 crores and profit before tax from Rs 3.63

THE DELHI CLOTH & GENERAL MILLS CO. LTD.

NOTICE

It is hereby notified for the information of the public that The Delhi Cloth & General Mills Co. Ltd. proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval for the establishment of a new undertaking for manufacturing, marketing and servicing of Light Commercial Vehicles (Payload 1.0 to 3.0 tonnes). The turnover is expected to be Rs. 127.5 crores at full capacity. Other particulars of the proposed new undertaking are as under :

1. Name of the proposed undertaking	A new name will be given to this undertaking.
2. Name(s) of persons or authority/authorities proposing to establish the new undertaking. Where it is a body corporate, furnish details of its management structure together with those of the proposed undertaking.	The Delhi Cloth & General Mills Co. Ltd., Delhi. It is managed by Managing Directors. The new undertaking will be managed by a Managing Director.
3. Capital structure of the applicant person or authority and of the proposed undertaking	(see below)
4. Proposed location of the new undertaking	In one of the backward districts of Himachal Pradesh.
5. Brief outline of the cost of the project, the scheme and source of finance.	The estimated capital outlay is Rs. 56.0 crores which is proposed to be financed by share capital and long term loans.

	(Rs. in crores)	
	Applicant	**Proposed Undertaking**
Authorised	50.00	40.00
Issued, Subscribed and Paid-up		
Preference	2.17	18.6
Equity	17.40	

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

Dated this day of
19th July, 1979.

Sd/-
(S. RATNAM)
Executive Director

crores to Rs 4.10 crores. The after-tax profit amounted to Rs 2.70 crores against Rs 1.69 crores previously. The board has proposed the payment of an unchanged dividend of 25 per cent besides the issue of bonus shares on a four-for-five basis.

UCO Bank

With a branch spread of 1063 in India and a deposit strength of Rs 1236 crores, United Commercial Bank happened at the end of 1978 to be the largest nationalised bank in the eastern and north-eastern region of the country. The unprecedented natural calamities, especially in eastern and northern region, affected adversely the bank's expansion of credit to the agricultural sector as well as to small-scale units. Small units were also affected by severe power shortages. In spite of all these, the bank's priority sector advances stood at the end of 1978 at Rs 179.05 crores as against Rs 152.16 crores at the end of 1977 forming 26.85 per cent of the bank's total advances.

The bank also maintained a comfortable profit position (Rs 221.53 lakh against 212.87 lakh), in the face of increased expenses under practically all heads. The bank has 24 lead districts in seven states West Bengal, Assam, Orissa, Bihar, Rajasthan, Himachal Pradesh and Punjab. In the lead districts there is not a single block which is unbanked. Credit plans were launched for all the 24 lead districts. The bank is now preparing to draw up fresh lead disitrct credit plans for 1980-82.

The table below shows the progress of the bank during the last decade.

	On 18-7-69	1978
Number of employees	8621	20,018
Number of offices	357	1,066
Deposits	Rs 238 crores	Rs 1,236 crores
Advances	Rs 151 crores	Rs 791 crores
Priority sector advances	Rs 20 crores	Rs 225 crores
Income	Rs 9.1 crores	Rs 103.7 crores
Expenditure	Rs 8.8 crores	Rs 101.4 crores
Profit	Rs 0.4 crores	Rs 2.2 crores
Investment	Rs 82 crores	Rs 310 crores
Working funds	Rs 258 crores	Rs 1347 crores

Bank of Baroda

The Bank of Baroda has entered the field of management of public capital issues. The maiden issue being handled by it is "Precision Jewels". Quite a few other projects are also being processed by the bank.

Hindoostan Spinning

Hindoostan Spinning and Weaving Mills has fared well during the year ended March 31, 1979. The directors have recommended a dividend of eight per cent on equity shares besides clearance of preferential dividend for 1977-78. According to preliminary figures, the turnover has risen from the previous year's level of Rs 47.07 crore to Rs 54.23 crore and the outcome has been a gross profit of Rs 2.47 crore against a trading loss of Rs 1.28 crore. After providing Rs 69 lakh (Rs 67 lakh) for depreciation, there is a net profit of Rs 1.78 crore compared to previous year's net loss of Rs 1.95 crore. The proposed dividend will absorb Rs 29.05 lakh.

ITC

ITC fared well during the year ended March 1979. The directors have decided to maintain dividend at 15 per cent. The bonus shares will be eligible for a proportionate payment for the period June 14 to March 31 (291 days). According to preliminary figures, the turnover rose by 10 per cent from the previous year's Rs 382.29 crores to Rs 420.51 crores in 1978-79. Profit before tax expanded by about 47.5 per cent from Rs 8.45 crores to Rs 12.47 crores. With the tax liability claiming as much as Rs 7.48 crores against Rs 4.33 crores, however, the gap was narrowed and the net profit was Rs 4.63 crores compared to the previous year's Rs 4.12 crores.

After writing back Rs 13.11 lakhs (Rs 15.06 lakhs) from development rebate reserve, Rs 19.50 lakhs (Rs 101.50 lakhs) had been transferred to investment allowance reserve. Other provisions are, Rs 113.12 lakhs (Rs 27.61 lakhs) for the general reserve and Rs 10 lakhs (same) for debenture redemption reserve. The proposed dividend will be payable on or after September 24.

Indian Dyestuff

Indian Dyestuff Industries has reported good performance for the year ended March 1979 with higher sales and profits and the directors have recommended a dividend of 20 per cent inclusive of four per cent by way of silver jubilee bonus. Last year the company had paid a dividend of 16 per cent. The shareholders had been expecting a gift of shares from the company, instead of the cash bonus. Reflecting their disappointment over absence of bonus issue announcement, IDI shares were marked down from Rs 444 to Rs 413 in the Bombay market before closing at Rs 418 recently.

According to preliminary figures the company's net sales are 24.7 per cent up from Rs 37.39 crores in the previous year to Rs 46.61 crores in 1978-79 and gross profit at Rs 6.37 crores is 14.1 per cent better than Rs 5.58 crores. With depreciation requiring Rs 143 lakhs (Rs 95.06 lakhs), investment allowance Rs 107 lakhs (Rs 28 lakhs) and tax liability Rs 185 lakhs (Rs 245 lakhs) the gap is narrowed and net surplus is Rs 2.02 crores compared to the previous year's Rs 1.90 crores. Out of this, the proposed dividend on preference and equity shares will demand Rs 1.23 crores (Rs 85.22 lakhs). The enhanced distribution is thus well covered by earnings.

Precision Jewels

Precision Jewels, a Rs 68 lakh project, is being set up by technocrats at Tarapur industrial area at Bolsar, a notified backward area of Maharashtra, to manufacture 60 lakh watches, meter and instrument jewels a year. It is coming to the capital market with a public issue of 92,000 equity shares of Rs 10 each at par to raise a part of the finance to meet the project cost. The annual production of mechanical watches in the country is estimated at 25 lakh watches. Since each watch, on an average, needs 20 jewels, the present demand for watch jewels alone is nearly five crores a year, while the current domestic production is just a little over one crore. The company, which is scheduled to go into commercial production in November next, has already applied for an increase in its annual licensed capacity to 1.20 crore jewels. The main raw material for watch jewels, synthetic ruby boule, is available in sufficient quantities within the country. The company has already imported from world-renowed Swiss and Italian manufacturers all its sophisticated and electronically controlled plant and machinery.

Peico Electronics

The directors of Peico Electronics and Electricals (formerly Philips India) have decided to close the register of members from August 17 to 21, both days inclusive, for the purpose of ascertaining the names of those members who would be entitled to the offer for sale of 629,600 equity shares of Rs 10 each, now held by NV Philips' Gloeilampenfabriken of Holland on a 'rights' basis in the ratio of 1:4.

Boehringer Knoll

Boehringer Knoll is keeping the dividend unchanged at 12 per cent for the year ended April 30, 1979. Preliminary figures show a higher turnover of Rs 4.31 crore against Rs 8.67 crore in the previous year followed by a lower profit before tax of Rs 40.06 lakh against Rs 53.49 lakh. After providing Rs 27 lakh (Rs 34.34 lakh) for taxation and investment allowance reserve, the net profit is Rs 13.06 lakh compared to the previous year's Rs 19.15 lakh. The proposed dividend will absorb Rs 12 lakh (same).

Facit Asia

The directors of Facit Asia have declared an interim dividend of 7.5 per cent for the current year ending December 31, 1979. Last year the company paid a total dividend of 10 per cent.

Graham Firth Steel

The directors of Graham Firth Steel Products (India) have decided to maintain the dividend at 15 per cent for the year ended March 31, 1979. Brief preliminary figures show that on a turnover of Rs 4.61 crores, the company has earned a gross profit of Rs 72.28 lakhs against Rs 55.80 lakhs in the previous year. After making necessary provisions, the net profit is Rs 21.49 lakhs (Rs 16.91 lakhs).

Elphinstone Spinning

Elphinstone Spinning and Weaving Mills has shown a net loss of Rs 44.86 lakhs on sales of Rs 7.53 crores for 1978 as against a loss of Rs 1.16 crores on sales of Rs 6.29 crores in the previous year. With the fresh loss, the total deficit carried to the balance sheet has mounted up to Rs 3.32 crores.

The directors attribute this outcome to the financial stringency experienced by the company in the first half of 1978. The plant could not be put to optimum level of operations. With the release of the balance amount of Rs 22 lakhs by the bank against the Maharashtra government guarantee towards the end of May 1978, the company was able to turn the corner from the beginning of the current year. The working results are quite encouraging and barring unforeseen circumstance, this healthy trend is expected to continue for the rest of the current year. The management is trying to offset the adverse impact of the power cut with the help of the company's diesel generating set.

Omega Cables

Omega Cables has reported a trading loss of Rs 29.85 lakh on gross sales of Rs 2.77 crore for the year ended December 31, 1978. After providing for depreciation, the net loss is Rs 34.92 lakh. The dividend has once again been skipped.

Indian Seamless Tubes

Indian Seamless Metal Tubes Ltd, which is setting up a Rs 3-crore unit at Ahmednagar (Maharashtra) to manufacture 15,000 tonnes of thick walled seamless tubes a year, is entering the capital market on July 26 with a public issue of 4.5 lakh equity shares of Rs 10 each at par.

Promoted by a professional engineer with 19-year experience in manufacturing seamless tubes, Mr B.R. Taneja and his associates along with the State Industrial and Investment Corporation of Maharashtra (SICOM), the project has technical collaboration with Mannesmann Demag-Meer of West Germany whose tube-making division alone has an annual turnover of over Rs 1,000 crore.

A special feature of the project is that it will be the first unit in Asia to have an Assel mill, which will ensure world-class product,

Thick walled seamless tubes have wide range of applications like rearaxle casing and other thick-walled shell required by commercial vehicles, shells for ball and roller bearing races, drill pipes, core drill rods, pit-prop hollows required by the mining, oil exploration and general engineering industry.

Bulk of the domestic demand, at present to being met by imports worth Rs 35 crore a year. There is 75 per cent duty on imports and this is a major advantage to the new unit.

The civil works have been completed and the imported equipment is on its way to India. The raw materials are all indigenous and the unit is slated to go on stream by April next year.

HEAVY ENGINEERING
CORPORATION LIMITED
(A Government of India Enterprise)
MATERIALS MANAGEMENT
DIVISION
DISPOSAL SECTION/HQ.
P.O. DHURWA, RANCHI-834004
SHORT TENDER NOTICE FOR DISPOSAL OF:
LUBRICANTS & OILS
COMPRISING :

Rust Ban 392, Tarpantine Oil, Motrol MO2 Rust preventive, Carva Oil, Oil Benzine Technical Oil, Thinner T,Paint Ready mixed BIT Autocorossive black, Caltex oil—90150, Oil spindera, Oil velocite No. 6, Gulfsil EB 6 Oil, Magna BD. Oil, 650 T Mineral cylinder, P.C. Tempring Oil, Oil DTC No. B10C Brand, Oil Vactra light crator No. 2 grease, super cylinder mobil extra heela oil mineral, Oil servo fusesh 10, Oil Gulf/Elovol uhe/Gulf. etc.

Intending tenderers may see the above materials at respective sites, during working hours on working day. Tender paper may be had from the office of Manager (Mat. & FPS) HQ. on payment of Rs. 10/- (non refundable) payable to M/s. Heavy Engineering Corporation Ltd., Ranchi-4 by crossed postal order only from 8-8-79 to 18th August, 79. Sealed quotation will be received in Ranchi upto 3 P.M. on 22-8-79 and will be opened on the same day at 3.15 P.M. in presence of attending tenderers. Tenderers may obtain tender paper well in advance so as to reach this office within the stipulated period. The Corporation will not be held responsible for any postal delay. Tenders should be accompanied with an earnest money @2% of the quoted amount in the form of demand draft in favour of Heavy Engg. Corpn. Ltd., Ranchi-4 or in cash receipted by Chief Cashier/HQ. HEC Ltd.

MANAGER (MAT&FPS)HQ
davp 763(69)79

Maharashtra State Financial Corporation

Record breaking achievements in 1978-79. Highlights from speech of Mr Homi J. H. Taleyarkhan, Chairman, MSFC, at the Annual General Meeting.

Mr Homi J. H. Taleyarkhan

Addressing the Annual General Meeting of the shareholders of the MSFC, Shri Homi J H Taleyarkhan, Chairman, said ‘One of the most important national policies and programmes to-day is to give the maximum impetus and fillip to small scale and tiny scale industry so that employment potential could be created, dispersal of industries could be effected rural upliftment could be ensured and skills could be developed. This can be accomplished with the creation of opportunities with incentives and facilities particularly in the developing regions of our country. We have found from our tours that our people have great capacity and skills if given the opportunity and the training.

This is precisely what the Corporation, as the premier development bank in the country, has been striving to do throughout its career.

Corporation's Functions and Performance :

MSFC has been playing its part purposefully and effectively, as you will gather from the results of the year's operation which I will now enlarge upon. Indeed, you will be happy to note that the Corporation has once again broken all its past records and has taken further impressive strides in its performance both in sanctions and disbursements.

Sanctions :

Sanctions during the year were Rs. 32.74 crores in respect of 1746 applications compared with Rs. 27.56 crores for 1428 applications during the last year. Much shorter time is now taken in sanctions and disposals. The total applications sanctioned 1746, were 89% of the total applications disposed of, namely 1968, compared to 1428 applications or 83% during the previous year. The rejections were only 0.8%.

Sanctions in Maharashtra amounted to Rs. 28.95 crores for 1594 loans compared to Rs. 24.33 crores for 1317 loans in the previous year. In Goa, Rs. 3.79 crores were sanctioned for 152 loans compared to Rs. 3.23 crores for 111 loans in 1977-78. Thus, sanctions have increased both in Maharashtra and Goa.

Since the inception, MSFC has assisted 14,200 units with sanctions exceeding Rs. 219 crores. MSFC has been the first SFC to exceed Rs. 200 crores.

Assistance to Small Scale Industries in a Big Way :

Assistance sanctioned to Small Scale Industries was of the order of 94%. It will also be observed that out of 1746 Units assisted during the year, as many as 1439, or 82% of the loans sanctioned were for small amounts upto Rs. 2.00 lakhs and what is more, 91% were upto Rs. 5.00 lakhs.

Sanctions in Developing Areas :

The Corporation continues to pay concerted attention towards the industrial growth of developing and backward areas. During the year, it sanctioned 1388 loans for Rs. 21.89 crores as against 1047 loans for Rs. 17.33 crores in the previous year. Numberwise, the percentage was 79.5% as against 73%, and amountwise, it was 67% as against 63% in 1977-78. It is the anxious desire of the Corporation to reach out assistance to the smallest man in small areas both in our State and in the Union territory.

Record Disbursements :

The disbursements during the year amounted to Rs. 20.91 crores as against Rs. 18.07 crores in the previous year. The ratio of disbursement to net sanctions works out to 82%. The Corporation has been keen to assist the borrowers in implementing their projects expeditiously and so wherever possible it also extends the facility of interim disbursement against hypothecation of machinery.

World Bank/IDA :

Progress under World Bank Loan/IDA Line of Credit Schemes for purchase of machinery from abroad, has been more satisfying than in the previous year. 57 applications for Rs. 5.98 crores, compared with 52 applications for Rs. 4.41 crores in the previous year, were sanctioned. Total disbursement also increased to Rs. 2.93 crores, compared with Rs. 1.93 crores during the last year. Since the inception of the Scheme, the Corporation has sanctioned 310 loans for Rs. 23.08 crores including foreign exchange component of Rs. 14.50 crores—a remarkable progress for any SFC in the country.

Need Based Schemes :

The Corporation has formulated a number of need based Scheme to suit the requirements of a new class of entrepreneurs. With this end in view, the existing schemes have been either liberalised and/or new schemes introduced from time to time.

For Technocrats :

The Corporation continues to assist technocrats with degree or diploma in technical subjects. During the year, 30 such projects from technicians for Rs. 78.69 lakhs were sanctioned as against 21 projects for Rs. 39.72 lakhs in the previous year.

For Young Technicians :

The Scheme for assistance to Young Technicians has been liberalised during the year. The limit of assistance has been raised from Rs. 1.50 lakhs to Rs. 2.00 lakhs. Further, the assistance is available now not only to the degree or diploma holders without experience but also to those with experience but who could not afford academic education. During the year, the Corporation sanctioned 70 Schemes for Rs. 64.89 lakhs sponsored by Young Technicians.

For Educated Unemployed :

Financial assistance is given to educated unemployed persons for starting small industrial units and/or for engagement in transport lines. During the year, the Corporation assisted 413 such persons with Rs. 2.02 crores. Since inception of the schemes, the Corporation has assisted as many as 2608 unemployed persons to the tune of Rs. 11.14 crores.

Mini and Composite Loan Schemes :

In keeping with the pronounced policy of the Government to assist the uneducated and economically weaker class of Craftsmen and Artisans, based in the rural areas, the Corporation has, during the year, introduced a Mini-Loan Scheme. Under this scheme, small (mini) loans, ranging from Rs. 5,000/- to Rs. 10,000/-, are given to Balutedars and such other artisans, on liberal terms.

Under yet another scheme, viz, the 'Composite Loan Scheme', providing for both working capital and equipment assistance upto Rs. 25,000/- is proposed to be made available to artisans, craftsmen and tiny units. It has just come under way.

Employment:

One of the important objectives of the Corporation is to create employment opportunities through its assistance to the Industrial Units. During 1978-79, it is expected that such opportunities to the extent of 30000 would be created. Over the years, nearly 2.10 lakhs such opportunities have been so created and the actual employment with the stabilization and enlargement of many assisted units must be even more.

Central Subsidy :

The Corporation has also now been appointed as an agent for disbursement of Central Subsidy to the units located in the Union territory of Goa, Daman & Diu.

Automatic Refinance :

From July, 1978, IDBI introduced the scheme of refinancing all eligible loans upto Rs. 5.00 lakhs on the basis of the appraisal done by the Corporation and normally all small borrowers can get immediately the benefit of lower rate of interest automatically. During the year. the Corporation could avail refinance to the extent of Rs. 14.51 crores as against Rs. 7.92 crores in the previous year. This amount is the highest for any one year.

Seed Capital Assistance:

The Corporation also assists those entrepreneurs who genuinely cannot afford to bring all of their promoter's contribution to reduce the burden with the help of seed capital. During the year, the Corporation sanctioned Rs. 23.19 lakhs in respect of 38 cases by way of seed capital money.

Financial Results :

The gross income of the Corporation has risen from Rs. 8.23 crores in the last year to Rs. 9.51 crores, and profits from Rs. 2.61 crores to Rs. 3.00 crores for the year under review. Reserves have been strengthened further and now the total reserves stand at Rs. 6.92 crores, compared with Rs. 5.08 crores as at the end of previous year. In terms of percentage, reserves are 90% of the Share Capital,

Recoveries And Overdues:

The Corporation's attention is constantly engaged on the problem of recoveries which affect all financial institutions. It has embarked upon a round the year drive for effecting it. During the year under review, the Corporation was able to recover an amount of Rs. 15.53 crores of 67% of the amount of Rs. 23.24 crores which was due. This is slightly lower as compared with the percentage of recovery in the last year namely 69.81. The percentage of overdues has increased from 18.60 in the last year to 20.58 for the year under review. Renewed efforts will be made in the current financial year to make recoveries.

Nursing Of Sick Units:

Incidence of sickness is due to various reasons ranging from mismanagement, marketing failure and shortage of funds. With a view to dealing with such units objectively, the Corporation has evolved a package of concessions for rehabilitation of sick units. Concessions available under the scheme vary and depend upon the nature and needs of the affected units. Some units have been revived with such help.

Further Decentralization And Association With DICs:

The Corporation further decentralized its administration. Some Branch Offices have been opened with powers of sanctions and disbursements upto Rs. 50,000/-. More will be opend in the course of the year. All our Branch Offices and field offices work in close association with DICs. This will still further expedite prompt service to Small Scale and tiny units.

Promotion and Publicity :

The Corporation has enlarged and streamlined its public relations and publicity activities to generate more consciousness about our activities. These include systematic and selective advertising campaigns periodical press releases, publications of small and informative handouts and booklets as also publication of business-cum-house journal.

Developmental Outlook:

Let me assure you, friends, that while bearing in mind the business principles on which our Corporation conducts its operations, it plays an effective role in fulfilling the social and developmental obligations cast upon it as a premier Development Bank.

(This does not purport to be a report of the proceedings of the Annual General Meeting.)

New Excelsior Building
5th, 7th, 8th & 9th floors,
Amrit Keshav Nayak Marg,
Fort, BOMBAY-400 001.

GOVERNMENT OF INDIA
(MINISTRY OF HOME AFFAIRS)
DEPARTMENT OF PERSONNEL AND A.R.

……

ASSIGNMENT OF SIX SHIFT ENGINEERS TO THE TANZANIA SUGAR DEVELOPMENT CORPORATION.

The Tanzania Sugar Development Corporation require the services of six Shift Engineers having a minimum of three to five years working experience as a Shift Engineer in a Sugar factory or similar process plant. Familiarity with the operation maintenance and control of modern steam generating plant will be an added advantage.

Salary Scale :	Tanzania Shs. 27,600× 1,200 —38,400/- p.a. (One T. Sh. = 1.05 Rupees approx).
Education and Training	A recognized University degree or equivalent in Mechanical Engineering
Qualifications :	A post graduate training in sugar engineering from National Sugar Institute (India) A.N.S.I. or equivalent.

Applications in duplicate giving full particulars of educational qualifications and experience and indicating the post applied for should reach the Foreign Assignment Section, Department of Personnel and Administrative Reforms, North Block, Central Secretariat, New Delhi-110001 within thirty days of the publication of this advertisement. Those who do not fulfil the job requirements need not apply. Particulars should be neatly typed on separate sheets and not incorporated in the letter of application itself. Employees of Government/Semi-Government Organisations and Public Sector Undertakings should apply through proper channel. Advance copies will not be entertained in such cases. Applicants should write at the top of their applications the words "Recruitment No. 9/64/79-FAS-TANZANIA."

davp 561 (118) 79

RECORDS AND STATISTICS

Wholesale prices

(Base : 1970-71=100)

Review for the week ended June 30, 1979

THE OFFICIAL wholesale price index for 'All Commodities' stood at 203.3 (provisional) during the week ended June 30, 1979 as against 202.3 (provisional) for the previous week. At this level, the index was higher by 0.5 and 8.8 per cent respectively when compared to the previous week and that of a year ago.

Groupwise analysis of price movement is shown below:

The index for 'Food Articles' recorded a rise of 0.9 per cent to 186.4 as against 184.7 for the earlier week due to an increase in prices of eggs (+7%), tea (+4%), maize, ragi, fruits & vegetables and coffee (+2% each) and rice, jowar, barley and gram (+1% each). Price of milk (—1%), however, fell.

An advance of 0.4 per cent to 182.3 in the index for 'Non-Food Articles' was caused by higher prices of castorseed (+8%), soyabeans (+6%), groundnuts (+4%), raw silk (+3%), rape & mustard seed, gingellyseed, linseed, copra and raw skins (+1% each). However, prices of raw rubber (—5%), raw wool (−4%), raw cotton, kardiseed and raw hides (—1% each) declined.

The index for 'Minerals' group stood stationary at its earlier week's level of 566.9.

The index for 'Fuel, Power, Light & Lubricants' group remained firm at its previous week's level of 252.7.

Among manufactured products, the index for 'Food Products' registered a rise of 1.1 per cent to 188.1 as against 186.0 for the previous week due to an increase in prices of gingelly oil (+4%), gur and solvent extracted groundnut oil (+3% each), sugar, groundnut oil, cottonseed oil and salt (+1% each). However, prices of atta, suji, khandsari, rice bran oil and oilcakes (—2% each) fell.

The index for 'Beverages, Tobacco & Tobacco Products' remained unchanged at its previous week's level of 184.6. The index for 'Textiles' group stood at 192.4 as against 192.3 for the last week. Items which showed variations during the week were : silk & art silk fabrics (+3%), cotton yarn and knitting wool & knitting yarn (+1% each); jute manufactures (—1%). Prices of cotton cloth (mills) also recorded a fractional fall.

Higher prices of pulp (+5%) and paper (+1%) raised the index for 'Paper & Paper Products' by 1.5 per cent to 217.0 as against 213.7 for the previous week.

The index for 'Leather & Leather Products' stood stationary at its earlier week's level of 315.0.

The index for 'Rubber & Rubber Products' stood firm at its previous week's level of 199.5.

The index for 'Chemicals & Chemical Products' group stood stationary at 183.9. Items which showed variations during the week were: bichromates (+38%), soda ash and linseed oil (+3% each) and castor oil (+1%).

The index for 'Non-Metallic Mineral Products' moved up by 0.5 per cent to 239.0 as against 237.9 for the last week due to an advance in prices of vacuum flask (+8%), sanitaryware (+6%), a.c. cement products (+4%) and bricks (+2%).

The index for 'Basic Metals, Alloys & Metal Products' worked out at 242.8 as against 242.7 for the previous week. Price of steel furniture (+2%) moved up.

The index for 'Machinery & Transport Equipment' group stood stationary at its earlier week's level of 203.8.

Higher prices of house service meters (+5%), tooth brush (+4%) and fountain pens (+2%) raised the index for 'Miscellaneous Products' by 0.4 per cent to 203.7 when compared to 202.8 for the previous week.

Index Numbers of Wholesale Prices by Major Groups, Groups & Sub-Groups (Base : 1970-71=100)

Major groups, groups & sub-groups	Weight in relation to all-commodities	Week Ending				
		30-6-79 (Latest week)	23-6-79 (A week ago)	2-6-79 (4 weeks ago)	5-5-79 (8 weeks ago)	1-7-78 (A year ago)
		(Provisional)			(Final)	
1	2	3	4	5	6	7
ALL COMMODITIES	**1000.00**	**203.3**	**202.3**	**199.1**	**197.1**	**186.8**
I. Primary Articles	**416.67**	**196.7**	**195.3**	**190.6**	**187.8**	**185.3**
A. Food Articles	**297.99**	**186.4**	**184.7**	**178.9**	**175.6**	**178.1**
Foodgrains (i+ii)	129.22	175.7	174.3	172.3	170.2	173.0
(i) Cereals	107.43	162.9	161.5	159.0	157.6	159.4
(ii) Pulses	21.79	238.5	237.6	238.1	232.6	240.2
(iii) Fruits & vegetables	61.32	206.1	202.3	192.2	188.3	177.2

—*Contd.*

Index Numbers of Wholesale Prices by Major Groups, Groups & Sub-Groups—*Contd.*

1	2	3	4	5	6	7
(iv) Milk & milk products	61.50	157.7	176.5	170.0	167.2	170.3
(v) Eggs, fish & meat	18.97	241.0	238.8	220.8	215.6	218.3
(vi) Condiments & spices	10.94	138.2	138.4	134.6	140.1	184.6
(vii) Other food articles	16.04	206.2	200.2	196.6	179.7	200.8
B. Non-Food Articles	**106.21**	**182.3**	**181.3**	**179.2**	**177.6**	**170.3**
(i) Fibres	31.73	165.0	165.8	166.0	168.1	174.3
(ii) Oilseeds	42.01	169.2	166.0	159.6	154.4	166.0
(iii) Other non-food articles	32.47	216.0	216.4	217.5	216.8	172.1
C. Minerals	**12.47**	**566.9**	**566.9**	**566.9**	**566.9**	**485.1**
(i) Metallic minerals	2.29	206.0	206.0	206.0	206.0	202.4
(ii) Other minerals	4.16	205.3	205.3	205.3	205.3	194.5
(iii) Petroleum crude & natural gas	6.02	954.7	954.7	954.7	954.7	793.9
II. Fuel, Power, Light & Lubricants	**84.59**	**252.7**	**252.7**	**251.4**	**252.6**	**245.3**
(i) Coal mining	11.47	212.1	212.1	211.5	211.5	211.3
(ii) Mineral oils	49.12	279.3	279.2	279.2	279.3	271.2
(iii) Electricity	24.00	217.8	217.8	213.5	217.8	208.5
III. Manufactured Products	**498.74**	**200.5**	**199.7**	**197.4**	**195.4**	**178.2**
A. Food Products	**133.22**	**188.1**	**186.0**	**178.4**	**171.2**	**159.9**
(i) Dairy products (incl. processed milk & tinned milk)	3.88	208.3	208.3	208.3	208.3	201.9
(ii) Canned & preserved fruits & vegetables	0.39	175.0	175.0	175.0	175.0	166.6
(iii) Canned & preserved fish & sea food	0.36	247.8	247.8	247.8	247.8	206.0
(iv) Grain mill products	4.64	162.8	164.9	164.6	165.2	165.4
(v) Bakery products	1.85	156.8	156.8	156.8	156.8	157.4
(vi) Sugar, khandsari & gur	72.41	196.4	192.6	182.3	170.9	150.2
(vii) Sugar, confectionary, cocoa & chocolate	0.53	164.4	164.4	164.4	164.4	159.8
(viii) Miscellaneous food products (a+b+c)	49.16	177.8	177.4	172.1	169.3	170.2
(a) Edible oils	37.16	175.2	173.9	167.0	164.8	161.7
(b) Oilcakes	9.05	183.1	186.0	185.3	179.4	197.4
(c) Other miscellaneous food products	2.95	195.6	195.3	195.3	195.4	193.7
B. Beverages, Tobacco & Tobacco Products	**27.08**	**184.6**	**184.6**	**184.6**	**184.6**	**177.8**
(i) Wine industry	6.77	141.7	141.7	141.7	141.7	139.3
(ii) Soft drinks	0.82	196.6	196.6	196.6	196.6	224.9
(iii) Tobacco manufactured	19.49	199.0	199.0	199.0	199.0	189.3
C. Textiles	**110.26**	**192.4**	**192.3**	**192.3**	**192.2**	**174.8**
(i) Cotton textiles	81.02	191.2	191.0	189.5	190.0	177.7
(ii) Woollen yarn & textiles	2.44	224.8	224.2	224.2	224.2	216.7
(iii) Silk, art silk & synthetic fibres textiles	12.83	177.9	177.3	174.4	172.3	169.6
(iv) Jute, hemp & mesta textiles	12.14	196.4	197.6	211.1	209.1	144.6
(v) Textiles products n.e.c.	1.83	277.9	277.9	274.7	274.7	226.1

—*Contd.*

Index Numbers of Wholesale Prices by Major Groups, Groups & Sub-Groups—*Contd.*

1	2	3	4	5	6	7
D. **Paper & Paper Products**	**8.51**	**217.0**	**213.7**	**210.8**	**212.8**	**190.4**
E. **Leather & Leather Products**	**3.85**	**315.0**	**315.0**	**320.0**	**321.4**	**250.3**
(i) Tanned & cured finished leather	2.95	350.5	350.5	357.1	358.9	267.8
(ii) Footwear & other leather products	0.90	197.7	197.7	197.7	197.6	192.7
F. **Rubber & Rubber Products**	**12.07**	**199.5**	**199.5**	**198.9**	**199.5**	**175.2**
(i) Tyres & tubes	9.84	199.4	199.4	199.4	199.4	174.1
(ii) Other rubber products	2.23	200.0	200.0	196.4	200.0	180.1
G. **Chemicals & Chemical Products**	**55.48**	**183.9**	**183.5**	**182.6**	**182.0**	**175.8**
(i) Basic industrial chemicals	7.26	240.7	239.4	233.0	230.4	206.1
(ii) Fertilizers	12.52	165.0	165.0	165.0	165.0	176.0
(iii) Insecticides	1.16	252.8	252.8	252.8	252.8	231.1
(iv) Paints & varnishes	1.92	217.0	220.6	220.6	211.0	202.3
(v) Drugs & medicines	9.83	135.4	135.4	135.4	135.4	136.2
(vi) Cosmetics, soap & detergents	5.86	194.4	194.4	194.6	194.6	183.6
(vii) Inedible oils	1.54	156.9	152.4	148.0	152.8	145.9
(viii) Synthetic rosin/rosin & plastic materials	8.30	175.8	175.8	175.8	175.8	168.4
(ix) Dyestuffs & other chemicals n.e.c.	7.09	212.7	211.0	211.0	211.0	192.2
H. **Non-Metallic Mineral Products**	**14.15**	**239.0**	**237.9**	**237.6**	**236.2**	**200.1**
(i) Structural clay products	1.82	244.1	243.6	241.5	239.8	208.1
(ii) Glass & glass products	1.98	272.9	272.4	272.4	272.9	251.0
(iii) Earthernware & earthern pottery	0.96	283.7	280.2	280.2	280.0	252.8
(iv) Cement, lime & plaster	7.07	226.3	226.3	226.3	226.3	190.0
(v) Miscellaneous non-metallic mineral products	2.32	226.2	221.5	211.5	214.0	208.3
I. **Basic Metals, Alloys & Metal Products**	**59.74**	**242.8**	**242.7**	**241.2**	**242.7**	**211.1**
Basic metals & alloys (i+ii)	46.51	248.2	248.2	247.9	248.2	215.2
(i) Iron, steel & ferro alloys	34.73	253.7	253.7	253.7	253.7	214.8
(ii) Non-ferrous metals & their alloys	11.78	232.0	232.0	230.8	232.0	216.5
(iii) Metal products	13.23	224.0	223.5	217.9	223 5	196.6
J. **Machinery & Transport Equipment**	**67.18**	**203 8**	**203.8**	**203.7**	**202.6**	**181.2**
Machinery & machine tools (i+ii)	50.45	202 4	202 4	202 4	202 0	180.4
(i) Non-electrical machinery	30.91	210 4	210.4	210.4	209.7	186.5
(ii) Electrical machinery	19.54	189.8	189.8	189.8	189.8	170.8
Transport equipment (iii+iv)	16.73	208.0	207.9	207.5	204.2	183.4
(iii) Motor vehicles & parts	13.73	214.9	214.9	214.9	211.0	190.0
(iv) Motorcycles/scooters, bicycles & parts	3.00	176.2	176.0	173.7	173.2	153.4
K. **Miscellaneous Products**	**7.20**	**203.7**	**202.8**	**201.5**	**202.4**	**182.0**
(i) Wood & wood products	1.74	206.7	206.6	203.2	206.6	190.9
(ii) Other manufacturing industries n.e.c.	5.46	202.7	201.6	201.0	201.0	179.2

Source : Office of the Economic Adviser, Ministry of Industry, Government of India

Consumer Price Index Numbers for Industrial Workers

(Base : 1960 = 100)

Centre	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979 April	1979 May	A year ago
All-India	**186**	**192**	**207**	**250**	**317**	**313**	**301**	**324**	**331**	**337**	**339**	**323**
Ahmedabad	176	181	198	245	305	293	281	310	323	328	331	320
Alwaye	198	202	215	267	346	358	321	319	335	344	352	322
Asansol	189	194	206	245	316	317	318	338	342	348	354	329
Bangalore	186	194	212	265	318	332	321	342	339	350	354	334
Bhavnagar	186	194	217	273	327	315	297	325	340	344	345	340
Bombay	182	190	203	233	289	300	298	318	325	331	335	323
Calcutta	182	187	197	228	288	287	297	320	331	331	335	311
Coimbatore	163	177	189	218	309	319	304	319	326	332	343	317
Delhi	199	211	222	265	337	333	332	358	368	375	374	361
Digboi	189	188	198	234	310	317	310	336	339	342	350	338
Gwalior	191	197	214	271	348	324	318	343	350	352	352	345
Howrah	186	191	206	239	298	290	292	313	319	325	329	306
Hyderabad	189	195	211	251	304	316	308	337	341	340	338	334
Jamshedpur	183	187	202	249	313	293	288	316	322	329	331	311
Madras	170	182	203	229	301	314	288	311	318	327	327	305
Madurai	183	192	206	236	334	333	302	331	338	346	349	326
Monghyr	205	204	225	292	363	325	317	345	348	352	349	338
Mundakayam	197	199	210	263	337	346	304	302	313	318	323	305
Nagpur	187	192	203	256	314	326	297	315	325	332	333	313
Saharanpur	186	196	213	253	338	313	304	335	345	348	342	337
Sholapur	185	198	216	277	325	342	308	326	343	347	349	336

Source : Labour Bureau, Government of India, Chandigarh

Consumer Price Index Numbers for Urban Non-manual Employees

(Base : 1960 = 100)

Centre	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979 April	A year ago
All-India	**174**	**180**	**192**	**221**	**270**	**277**	**277**	**296**	**306**	**311**	**298**
Bombay	168	172	183	204	241	246	255	269	285	298	276
Delhi-New Delhi	174	180	190	217	262	273	274	288	303	311	292
Calcutta	170	174	180	204	238	243	251	265	279	282	267
Madras	175	188	204	231	291	306	294	311	321	329	314
Hyderabad-Secunderabad	174	180	195	223	270	283	282	305	318	322	311
Bangalore	172	180	194	228	272	284	286	306	309	316	307
Lucknow	166	174	185	215	265	270	274	297	305	309	301
Ahmedabad	171	173	188	222	271	272	263	291	298	300	296
Jaipur	183	188	205	244	308	311	312	334	338	344	333
Patna	191	190	199	229	286	284	282	299	308	316	298
Srinagar	184	191	200	215	262	280	300	319	344	353	333
Trivandrum	178	184	198	231	280	297	301	309	319	329	310
Cuttack-Bhubaneswar	176	184	196	221	266	270	272	290	301	304	293
Bhopal	180	188	204	238	295	296	295	318	319	320	313
Chandigarh	178	183	194	217	265	278	284	299	308	314	308
Shillong	166	175	183	208	257	274	268	284	296	311	288

Source: Central Statistical Organisation, New Delhi.

Index Numbers of Security Prices—All India

(Week ended Saturday)

(Base : 1970-71 = 100)

Item	Weight	1979										A year ago
		April 28	May				June					
			5	12	19	26	2	9	16	23	30	
I. GOVERNMENT AND SEMI-GOVERNMENT SECURITIES												
(Total : a+b+c)	100.0	97.7	97.8	97.8	97.7	97.8	97.7	97.7	97.7	97.7	97.7	97.7
a. Government of India	74.7	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.8	96.8	96.8	96.8
b. State Governments	19.7	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.7
c. Semi-Government Institutions	5.6	101.9	101.9	101.9	101.9	101.9	101.9	101.9	101.9	101.9	101.9	102.0
II. DEBENTURES OF JOINT STOCK COMPANIES												
All Industries	100.0	89.7	89.7	90.1	90.2	90.2	90.1	90.1	90.1	90.1	90.1	89.2
III. PREFERENCE SHARES												
All Industries	100.0	81.9	82.0	81.9	81.9	82.1	82.0	82.0	82.1	82.0	82.0	81.1
IV. ORDINARY SHARES												
All Industries	100.0	150.2	150.1	148.3	147.6	147.9	146.6	147.8	149.0	147.8	145.5	124.8
Of which :												
Tea Plantations	2.2	255.9	255.1	254.5	251.5	252.5	250.0	249.5	245.2	245.0	239.9	259.5
Cotton Textiles	9.7	147.4	146.3	143.5	142.0	141.6	140.6	139.9	142.3	144.0	139.2	107.9
Jute Textiles	0.9	121.3	124.9	125.1	123.4	121.2	118.6	117.8	117.0	115.2	113.2	69·3
Silk, Woollen and Rayon Textiles	6.2	189.6	189.4	187.3	184.9	185.0	182.7	185.1	187.6	187.9	186.8	146.6
Aluminium	3.8	74.6	72.8	72.3	72.0	72.8	73.6	74.6	74.9	73.9	73.2	57.6
Transport Equipment	5.4	145.3	146.2	140.5	138.5	139.2	138.1	142.0	143.2	139.1	133.5	94.8
Electrical Machinery, Apparatus, Appliances, etc.	6.5	149.4	149.7	148.0	145.8	148.7	146.7	147.9	149.1	149.7	147.6	122.3
Chemical Fertilisers	3.6	214.3	210.5	208.7	210.7	209.8	205.9	207.3	211.6	209.4	206.6	200.7
Cement	3.6	150.9	153.2	161.7	162.1	162.9	162.2	162.3	163.1	162.7	159.0	145.7
Paper and Paper Products	3.3	183.1	182.7	179.8	178.7	178.7	177.5	177.0	179.0	178.8	178.3	154.7
Rubber and Rubber Products	3.4	79.7	79.6	77.9	76.0	75.0	73.7	73.1	73.4	72.9	71.8	51.8
Electricity Generation and Supply	2.2	77.1	76.4	76.4	76.5	76.8	76.2	76.5	76.8	77.7	78.1	79.4
Shipping	2.0	123.5	121.2	119.2	119.4	120.5	125.2	131.5	134.1	131.7	129.5	94.1

Source : Reserve Bank of India.

Statement of Affairs of the Reserve Bank of India
(Issue and Banking Departments combinded)
(As on last Friday)

(Rs crores)

Item	1970-71	1972-73	1973-74	1974-75	1975-76	1976-77	1977 78	1978-79	1979 April	1979 May	1979 June	A year ago
1. **Notes in Circulation** (a—b)	4,212	5,253	6,127	6,190	6,535	7,743	8,602	10,267	10,744	11,074	11,244	9,348
(a) Total Notes Issued	4,221	5,272	6,160	6,232	6,573	7,779	8,616	10,318	10,793	11,115	11,267	9,361
Less												
(b) Notes held in Banking Department	10	19	33	42	38	36	14	51	48	41	25	13
2. **Deposits** (Total: a to e)	553	453	919	1,862	2,913	3,664	6,287	4,876	6,392	6,392	6,398	4,626
(a) Central and State Governments	264	71	159	541	671	388	2,771	724	2,201	2,083	2,138	395
(b) Scheduled Commercial Banks	207	279	610	611	607	1,146	1,674	2,634	2,819	2,879	2,855	2,138
(c) Scheduled State Co-operative Banks	9	17	16	18	21	28	41	46	48	47	49	70
(d) Other Banks	1	1	4	2	3	3	4	6	6	7	8	6
(e) Others	72	85	130	689	1,612	2,099	1,797	1,466	1,318	1,376	1,348	2,017
3. Other Liabilities	689	1,198	1,448	1,614	2,137	2,213	2,927	3,222	3,232	3,286	3,365	2,565
4. **Total Liabilities/Assets**	5,454	6,904	8,494	9,666	11,585	13,620	17,816	18,365	20,368	20,752	21,005	16,539
5. **Foreign Exchange Assets** (Total : a+b)	350	376	530	633	1,518	2,767	3,889	4,655	4,813	4,848	3,754	3,833
a. Foreign Securities	273	172	142	122	272	1,072	1,766	2,694	2,769	2,769		2,145
b. Balances held Abroad[1]	77	204	388	511	1,246	1,696	2,123	1,961	2,043	2,078		1,688
6. Gold Coin and Bullion	183	183	183	183	183	188	193	219	219	219	219	214
7. Government of India Rupee Securities	3,714	4,909	5,830	5,915	6,105	6,500	6,645	7,546[2]	8,031[2]	8,269[2]	8,420[2]	7,371[2]
8. **Loans and Advances** (Total : a to d)	958	725	1,161	1,533	2,052	2,430	2,107	2,352	2,081	2,147	2,276	1,848
(a) State Governments[3]	250	135	238	260	304	327	402	170	208	165	165	125
(b) Scheduled Commercial Banks	368	138	409	473	798	967	331	546	387	506	659	335
(c) State Co-operative Banks	306	322	317	441	459	488	595	558	410	396	372	479
(d) Others	34	130	197	359	491	648	779	1,078	1,076	1,080	1,080	909
9. **Bills Purchased and Discounted Total** : (a+b)	38	132	399	838	739	531	2,809	1,675	2,886	3,234	3,372	1,240
(a) Internal/Commercial	7	35	257	183	176	184	117	106	88	71	77	101
(b) Government Treasury Bills	31	97	142	655	563	347	2,692	1,569	2,798	3,163	3,295	1,139
10. Investments	113	514	294	382	444	215	1,077	672[4]	686[4]	708[4]	701[4]	710[4]
11. Other Assets[5]	98	65	97	180	544	988	1,096	1,246	1,652	1,327	1,262	1,323

1. Includes Cash, Short-term Securities and Fixed Deposits.
2. Including *ad-hoc* Treasury Bills.
3. Including temporary overdrafts.
4. Include investments in Foreign Shares/Bonds but exclude those in Rupee Securities.
5. Including rupee coin/Government of India rupee notes.

Note : Individual figures may not, in all cases, add up exactly to total due to rounding off.

All Scheduled Commercial Banks—Business in India
(As on last Friday)

(Amounts in Rs crores)

Item	1970-71	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979			A year Ago
									April	May	June	
1. Aggregate Deposits												
(Total : a+b)	5,906	8,643	10,139	11,827	14,155	17,566	22,211	26,875	26,993	27,318	27,869	23,312
(a) Demand Deposits	2,626	3,794	4,336	4,963	5,817	6,943	8,868	10,355	10,182	10,298	10,381	9,219
(b) Time Deposits	3.280	4,849	5,803	6,864	8,338	10,623	13,343	16,520	16,811	17,020	17,488	14,094
2. Borrowings from Reserve Bank†	368	138	409	473	798	967	331	546	387	506	659	335
3. Cash in Hand and Balances with Reserve Bank												
(Total : a+b)	364	487	856	908	912	1,500	2,143	3,180	3,374	3,455	3,457	2,755
(a) Cash in Hand	167	221	246	296	305	354	469	546	554	576	602	617
(b) Balances with Reserve Bank††	197	266	610	611	607	1,146	1,674	2,634	2,819	2,879	2,855	2,138
4. Investments												
(Total : a+b)					4,607	5,536	7,897	9,046	9,400	9,321	9,418	7,552
(a) Government Securities*	1,362	2,161	2,362	2.826	3.283	3,930	5,907	6,571	6,899	6,775	6,908	5,497
(b) Other Approved Securities					1,324	1,606	1,990	2,476	2,501	2,546	2,510	2,055
5. Bank Credit												
(Total : a+b+c)	4,684	6,115	7,399	8,762	10,877	13,173	14,939	17,669	17,881	18,131	18,538	15,694
of which :												
5.1 For Financing Food Procurement Operations@	214	339	367	613	1,521	2,190	1,984	2,210	2,207	2,581	2,996	2,518
(a) Loans, Cash-Credits and Overdrafts	3,708	4,996	5,994	7,106	8,527	11,411	12,709	15,232	15,352	15,656	16,210	13,720
(b) Inland Bills Purchased and Discounted**	765	861	1,037	1,271	1,852	1,155	1,575	1,627	1,678	1,633	1,538	1,359
(c) Foreign Bills, Purchased and Discounted	211	258	367	385	498	607	655	810	853	842	790	615
6. Cash-Deposit Ratio												
(3) as per cent of (1)	6.2	5.6	8.4	7.7	6.4	8.5	9.6	11.8	12.5	12.6	12.4	11.8
7. Investment-Deposit Ratio												
(4) as per cent of (1)					32.5	31.5	35.6	33.7	34.8	34.1	33.8	32.4
(4a) as per cent of (1)	23.1	25.0	23.3	23.9	23.2	22.4	26.6	24.5	25.6	24.8	24.8	23.6
8. Credit-Deposit Ratio												
(5) as per cent of (1)	79.3	70.8	73.0	74.1	76.8	75.0	67.3	65.7	66.2	66.4	66.5	67.3

† As available in the Reserve Bank records.

†† As per the statement of Affairs of the Reserve Bank of India with effect from July 6, 1973.

* At Book Value; including Treasury Bills and Treasury Deposit Receipts, etc.

** Excludes Bills re-discounted with Reserve Bank of India.

@ Figures relate to Advances of Indian Scheduled Commercial Banks. With effect from week ending June 17, 1977 such advances by Foreign Scheduled Commercial Banks are also included.

Note : Individual figures may not, in all cases, add up exactly to total due to rounding off.

Analysis of Money Stock Measures

(As on last Friday unless otherwise indicated)

(Rs crores)

Sl. No.	Item	1970-71	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979			A year ago
										April	May	June†	
	MONEY STOCK MEASURES (M_1 and M_3)												
1.	**Money Supply (M_1)** (Total : a+b+c)	7,321	9,684	11,172	11,911	13,143	15,609	18,385	21,717	21,908	22,398	22,685	19,356
	(a) Currency with the Public	4,367	5,420	6,308	6,348	6,704	7,873	8,631	10,194	10,662	10,974	11,149	9,423
	(b) Bank Money (=Demand Deposits with Banks)	2,910	4,213	4,819	5,485	6.385	7,636	9,684	11,320	11,167	11,276	11,353	9,835
	(c) Other Deposits with Reserve Bank*	44	51	45	78	54	100	70	203	79	148	183	98
2.	**M_3 (=M_1+Time Deposits with Banks)** (Total: 1+7a)	10,958	15,033	17,571	19,462	22,286	27,279	32,915	39,644	40,155	40,865	41,437	34,559
	SOURCES OF CHANGE IN M_1												
3.	**Net Bank Credit to Government** (Total : a+b)	5,264	7,770	8,726	9,533	10,112	11,022	13,473	15,341	15,948	16,516	16,747	13,907
	(a) RBI's Net Credit to Government	3,807	5,489	6,234	6,570	6,697	6,926	7,387	8,565	8,842	9,516	9,614	8,096
	(b) Other Banks' Credit to Government	1,457	2,281	2,492	2,963	3,414	4,096	6,085	6,776	7,106	7,000	7,133	5,811
4.	**Bank Credit to Commercial Sector**** (Total : a+b)	6,455	8,729	10,701	12,647	15,392	18,503	21,230	25,207	25,401	25,675	25,904	21,731
	(a) RBI's Credit to Commercial Sector	125	265	562	652	721	887	954	1,249	1,229	1,216	1,219	988
	(b) Other Banks' Credit to Commercial Sector	6,330	8,464	10,139	11,995	14,671	17,617	20,276	23,958	24,172	24,459	24,685	20,643
5.	**Net Foreign Exchange Assets of Banking Sector**	559	577	674	392	1,094	2,471	4,462	5,437	5,608	5,664	5,561	4,587
6.	**Government's Net Currency Liabilities to the Public**	384	457	502	531	555	568	593	589	589	592	596	594
7.	**Non-monetary Liabilities of Banking Sector** (Total : a+b+c)	5,341	7,849	9,431	11,192	14,009	16,955	21,373	24,857	25,638	26,049	26,123	21,463
	(a) Time Deposits with Banks@	3,637	5,349	6,399	7,551	9,142	11,671	14,530	17,927	18,247	18,467	18,752	15,203
	(b) Net Non-monetary Liabilities of RBI	714	1,219	1,437	1,670	2,577	2,833	3,452	3,312	2,892	3,257	3,193	2,998
	(c) Residual (Derived)	990	1,281	1,595	1,971	2,289	2,451	3,391	3,618	4,499	4,325	4,178	3,262
8.	**M_1 (Money Supply)** (3+4+5+6—7)	7,321	9,684	11,172	11,911	13,143	15,609	18,385	21,717	21,908	22,398	22,685	19,356

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* Excluding Balances held on I.M.F. Account No. 1, Reserve Bank of India Employees' Provident Fund, Pension Fund and Co-operative Guarantee Fund and some extraordinary items. The amounts collected under the Additional Emoluments (Compulsory Deposit) Act, 1974 and the Compulsory Deposit Scheme (Income Tax Payers) Act, 1974 are also excluded since August 16, 1974 and December 13, 1974 respectively.

** Includes Public Sector Enterprises.

@ Relate to Time Deposits of Scheduled and Non-Scheduled Commercial Banks, State Co-operaive Banks, Central Co-operative Banks and Primary Co-operative Banks.

† Figure relating to last Friday of June 1979 (i.e. June 29) are not yet available, hence the figures relate to June 22, 1979.

Note : Individual figures may not, in all cases, add up exactly to total due to rounding off.

Index Numbers of Industrial Production

(Base: 1970=100)

Code No.	Description	Weight	1971	1972	1973	1974	1975	1976	1977	1978 (P)	1979		1978	
											Jan (P)	Feb (P)	Jan	Feb
	GENERAL INDEX (CRUDE)	**100.00**	**104.2**	**110.2**	**112.0**	**114.3**	**119.7**	**131.4**	**138.3**	**147.6**	**159.5**	**152.5**	**149.0**	**142.3**
1.	**Mining and Quarrying**	**9.69**	**101.0**	**105.0**	**105.3**	**113.1**	**127.4**	**136.8**	**139.9**	**142.0**	**167.0**	**160.0**	**158.0**	**160.0**
2-3.	**Manufacturing**	**81.08**	**104.2**	**110.1**	**112.2**	**113.0**	**116.1**	**127.5**	**135.1**	**144.2**	**153.8**	**148.6**	**144.3**	**137.5**
20.	Food Manufacturing Industries except Beverage Industries	7.74	98.1	101.0	98.0	98.0	107.0	110.5	118.4	138.6	166.2	162.6	163.4	150.7
21.	Beverage Industries	0.69	117.0	163.5	187.9	185.1	174.5	298.9	347.0	387.9	308.4	292.2	315.7	291.8
22.	Tobacco Industries	2.21	104.5	98.6	102.4	104.7	96.1	106.6	107.7	113.5	137.7	122.0	105.1	100.1
23.	Manufacture of Textiles	17.43	99.0	105.3	103.6	98.9	101.3	105.6	103.3	110.2	103.9	99.5	109.3	103.1
24.	Manufacture of Footwear, Other Wearing Apparel etc.	0.34	99.5	85.1	92.5	89.9	90.9	90.6	80.4	73.6	82.9	83.3	81.2	69.1
25.	Manufactare of Wood and Cork except Furniture	0.49	112.6	114.0	119.7	124.4	110.4	114.2	131.4	124.2	122.7	122.7	127.6	126.0
27.	Manufacture of Paper and Paper Products	2.24	104.3	107.7	109.9	118.1	109.8	110.7	112.8	121.0	123.3	119.0	120.0	116.5
29.	Manufacture of Leather and Fur Products except Footwear etc.	0.32	93.6	100.4	114.0	109.7	124.2	110.7	104.2	72.2	82.7	61.9	71.3	70.3
30.	Manufacture of Rubber Products	2.22	108.9	114.2	112.8	119.8	122.6	122.7	127.9	142.6	158.8	146.5	127.3	136.7
31.	Manufacture of Chemicals and Chemical Products	10.90	112.2	124.7	128.1	125.3	131.7	155.5	171.6	182.4	193.9	190.9	185.5	162.7
32.	Manufacture of Products of Petroleum and Coal	1.62	106.2	106.0	111.4	112.8	119.1	124.8	132.7	140.9	156.0	134.6	158.0	146.3
33.	Manufacture of Non-metallic Mineral Products except Products of Petroleum and Coal	3.33	109.7	116.5	117.6	117.8	124.4	139.1	147.4	152.1	160.1	148.6	153.2	145.5
34.	Basic Metal Industries	8.84	102.8	112.3	98.4	98.7	115.4	137.9	144.8	144.9	146.7	139.2	148.2	139.7
35.	Manufacture of Metal Products except Machinery and Transport Equipment	2.77	105.5	115.0	116.3	125.9	126.8	133.7	137.0	154.8	164.8	166.1	142.9	150.3
36.	Manufacture of Machinery except Electrical Machinery	5.55	115.0	118.0	139.3	146.1	152.7	164.8	179.8	201.3	233.0	224.6	196.5	188.0
37.	Manufacture of Electrical Machinery, Apparatus, Appliances and Supplies	5.30	105.4	116.3	123.3	129.3	120.2	126.5	145.5	150.7	167.4	181.0	133.9	139.9
38.	Manufacture of Transport Equipment	7.39	100.2	94.2	109.6	116.9	111.9	122.3	124.5	123.1	144.9	135.2	127.9	121.5
39.	Miscellaneous Manufacturing Industries	1.70	95.7	89.0	90.2	83.9	71.9	72.9	99.9	134.2	123.9	114.1	102.0	154.0
5.	**Electricity**	**9.23**	**107.2**	**116.8**	**117.7**	**126.3**	**138.0**	**160.0**	**165.4**	**183.6**	**201.0**	**179.1**	**181.5**	**166.2**

(p) Provisional.

Source: Central Statistical Organisation.

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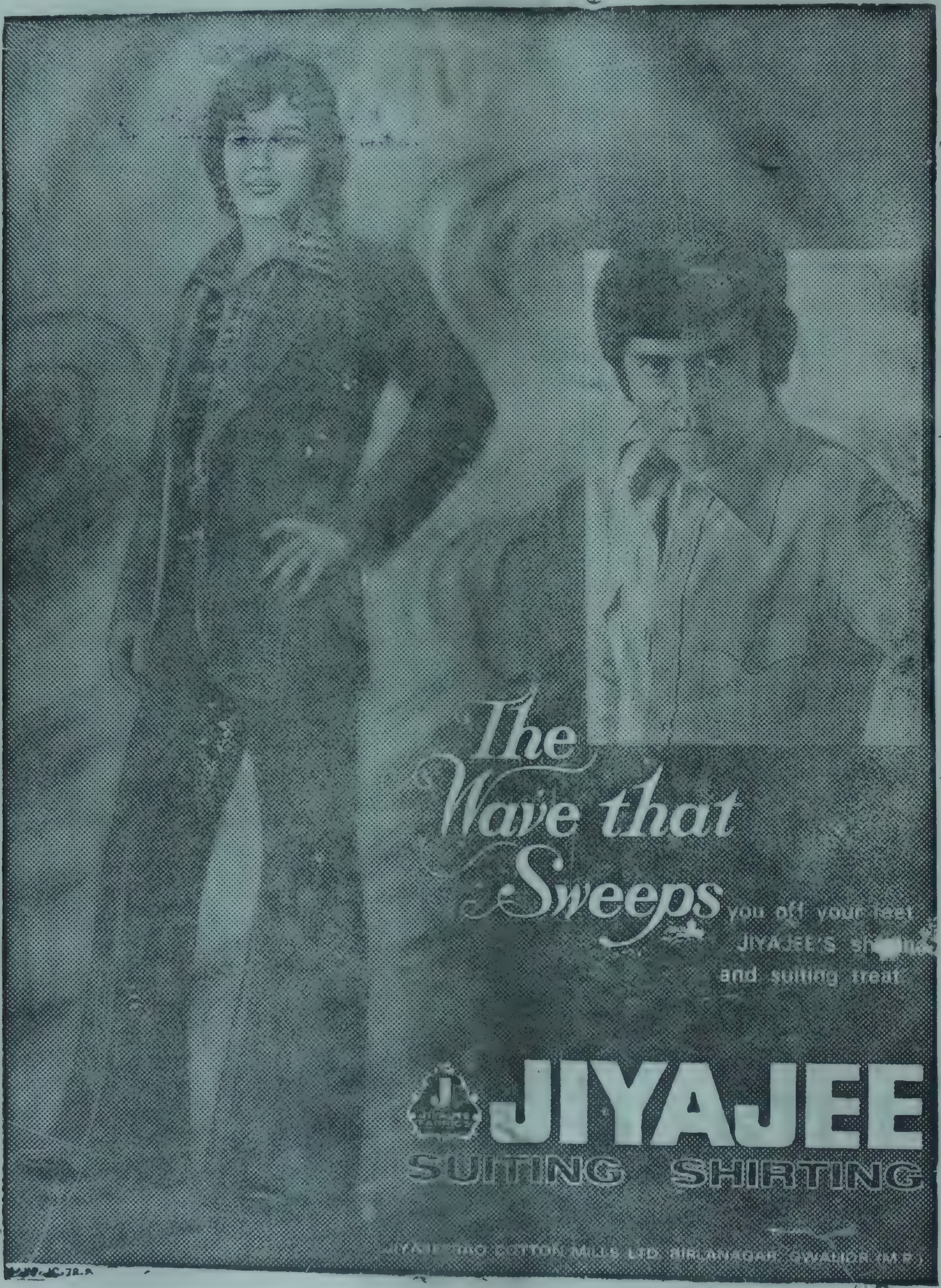
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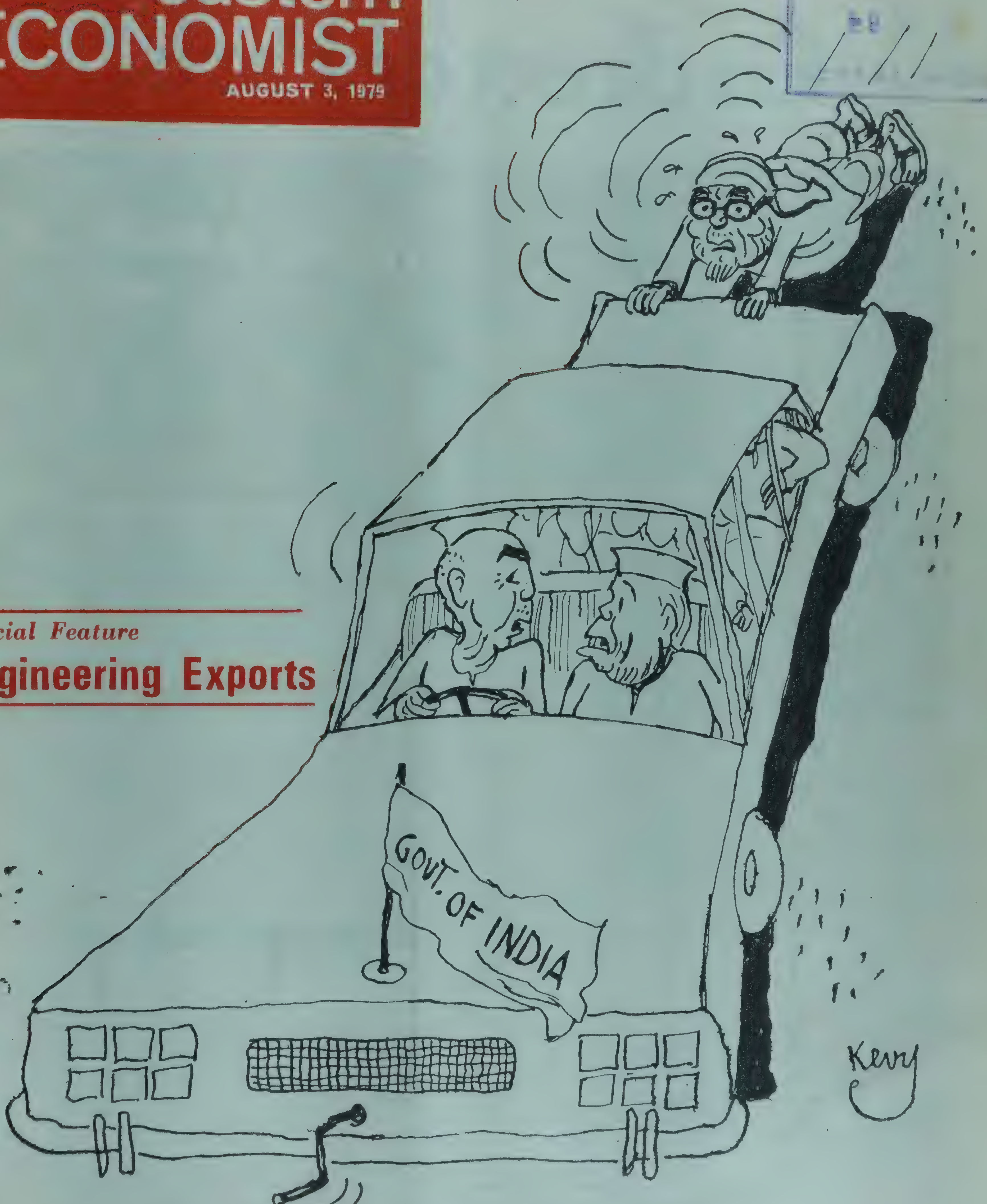
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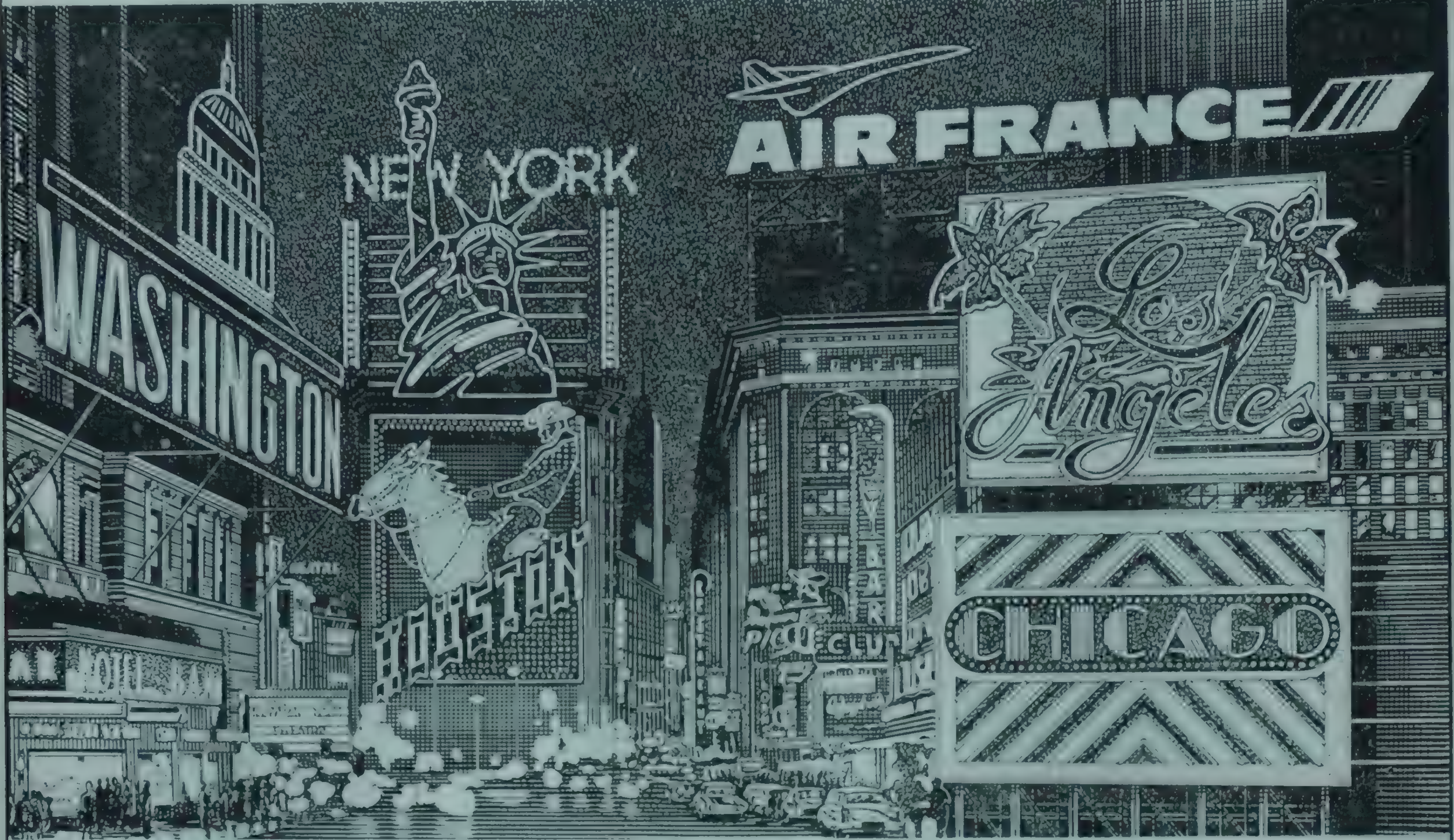

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Charan's cabinet

NOTWITHSTANDING THE fact that the choice of his ministerial colleagues has been an unusually difficult task, the new prime minister, Mr Charan Singh, has taken care to ensure full support from his major coalition partner, the Congress (S). Difficulties arose on the very day the swearing-in ceremony was to be held. Six members of the Congress (S)—Mr C. Subramaniam, Mr K. Brahmananda Reddy, Mr Hitendra Desai, Mr T. A. Pai, Dr Karan Singh and Mr K. C. Pant—out of the seven (the seventh member being the deputy prime minister, Mr Y. B. Chavan) in the first batch of fifteen including the prime minister, could not take the oath of office because of rumblings in their party ranks on the ground that the non-inclusion of the minorities and the backward classes in its list had sullied its image. Reports were also current that there were reservations on the part of the Congress (I), which had also lent support to Mr Charan Singh in becoming the prime minister, about some members selected by him as cabinet ministers, particularly Mr T. A. Pai and Dr Karan Singh, who had given evidence against her emergency misrule before the Shah Commission and had also been standing in the way of the unity of the two Congress parties on her terms.

This crisis, however, was resolved two days later with the above six ministers being sworn in along with Mr Mohammad Shafi Qureshi and two ministers of state—Dr Henry Austin and Mrs Rashida Haque Choudhury, the other representatives of the Congress (S)—, some more from the other constituents of the coalition and Mr H. R. Khanna, a former judge of the Supreme Court who had been superseded during Mrs Gandhi regime for upholding the citizens' right to life and personal liberty even during the emergency. Another member of the backward classes, Mr T. S. Shrangere (Congress-S) was added as minister of state on the subsequent day, raising the strength of the council of ministers to twenty-seven. In this, the Janata-S has twelve members—the prime minister, Mr Charan Singh, the cabinet ministers, Mr S. N. Mishra, Mr Biju Patnaik, Mr Brahm Prakash, Mr Ram Kinkar, Mr Zulfiquarullah, Mr Rabi Ray and ministers of state, Mr Bhanu Pratap Singh, Mr Janeshwar Mishra, Mr Jagbir Singh, Mr Dhanik Lal Mandal and Mr Nar Singh. Mr H. N. Bahuguna and Mr. Fazlur Rehman, both cabinet ministers, are former members of the Congress for Democracy. They, of course, are now the associate members of the Janata-(S). Mr Khanna does not belong to any group. He is not even a member of either house. Mr Purushottam Kaushik represents the Socialist group.

The dissatisfaction over the ministry-making, however, has not yet fully died down. The representation provided to the Muslims, indeed, has been generous. But the scheduled castes and scheduled tribes have still to get a fair and adequate representation. The position, of course, can be expected to be rectified when the council of ministers is expanded further in course of time.

In the distribution of portfolios, one wonders whether Mr Charan Singh has purely gone by the requirements of administrative efficiency. Most of the key portfolios—Home, Defence, Industry, Commerce, Petroleum and Chemicals (and also Railways for the time being), Energy and Education, along with Tourism and Civil Aviation, have gone to the Congress (S). Mr Khanna was the obvious choice for the portfolio of Law, Justice and Company Affairs. Finance too has gone to Mr Bahuguna who is not a full member of the Janata (S): so also Labour and Parliamentary Affairs to Mr Fazlur Rehman. Mr Charan Singh's own party colleagues in the Janata (S) have had to remain content with ministries of External Affairs, Agriculture and Irrigation, Works and Housing, Communications, Health and Family Welfare, Rural Reconstruction, Shipping and Transport and Steel and Mines to which has been added the department of Coal from the ministry of Energy. The efforts Mr Charan Singh has had to make in placating the Congress (S) have resulted in the swapping of the portfolios of Mr Qureshi and Mr Fazlur Rehman, the former being disinclined to continue as the minister for Labour and Parliamentary Affairs. The Socialist representative has bagged the important portfolio of Information and Broadcasting.

It remains to be seen how smoothly the new cabinet will function. The minimum programme is yet to be announced. Some indications of it, however, have been given by Mr Charan Singh in his broadcast to the nation. He has assured that Hindi will not be imposed on unwilling sections of people; justice will be meted out to the minorities and the other weaker sections of society; the general law and order situation will be improved; and corruption will be eradicated at the top levels. On the economic front, elimination of unemployment is to be accorded the highest priority. The development of agriculture and small-scale industries is to be fostered in a concerted manner. But this does not imply that the government has any reservations about the role of big industries as a matter of principle. Wherever necessary, big industries will continue to be established and where the national interest demands, such industries will be put up in the public sector. The containing of the inflationary trends is another crucial task to which the government is to address itself immediately. In the sphere of foreign affairs, the policy of non-alignment is to be continued.

Khanna resigns

Within 48 hours of being sworn in as minister for Law, Justice and Company Affairs in Mr Charan Singh's government, Mr H. R. Khanna submitted his resignation on August 2. The reason for his resignation is understood to be the criticism from some members of the bar against his acceptance of the office. Efforts are being made to prevail upon him to withdraw the resignation.

Mr Khanna's resignation, it is learnt, of course, has nothing to do with any differences with Mr Charan Singh or the policies of the government.

None can have any quarrel with the above broad policy as well as with the objectives of reducing the disparities of growth and living standards between the rural and urban communities. But Mr Charan Singh's reference to nationalisation of industry "in very special cases" is, indeed, intriguing. It is difficult to say whether this has been done with a view to appeasing the leftists among his supporters or this threat has been held out to make the industrialists behave. Interestingly enough, Mr Charan Singh has not yet thrown any light on whether there has been any change in his views on planning.

Next vice-president

Consensus is stated to have been reached amongst the leaders of the various parties represented in Parliament on putting up Mr M. Hidayatullah, the former Chief Justice of India, for the august office of vice-president to succeed Mr B.D. Jatti. The election of the new vice-president is scheduled for August 27.

The future of the present government, of course, continues to be uncertain. This is because it may not be easy to harmonise the thinking of the various constituents but also owing to the fact that some other developments have taken place since the swearing-in of the new government. The leader of the Congress (I) in Lok Sabha, Mr C. M. Stephen, has declared that the unconditional support which his party lent to making Mr Charan Singh the prime minister ended there. Its future support will depend on the totality of the picture that emerges.

But much more disconcerting for the coalition must have been the siding of the Congress (I) with the Janata government in Bihar which led to the defeat of the censure motion against it brought by the newly formed Janata (S) group there. Similar appears to be the attitude of the Congress (I) in Haryana where Mr Charan Singh's party colleague, Mr Devi Lal, is endeavouring to bring down the Janata cabinet.

The leader of the opposition, Mr Jagjivan Ram, has asserted that Mr Charan Singh's government is just a care-taker government and the president should not allow it to take policy decisions until it secures the vote of confidence on the floor of Lok Sabha, as directed. He has also claimed that instead of increasing, the support to the government has diminished since its coming into power. With a view to mending its own fences, the Janata party has amended its constitution to debar persons believing in the concept of a theocratic state remaining its members.

Although efforts are being made by Mr Charan Singh to gather support from the AIADMK, the Akali Dal, some members of the Janata party, etc., so that his dependence on the Congress (I) is reduced, the stability of his government has become highly suspect. Another development the outcome of which will have to be watched closely is the move towards reunification of the Congress forces.

Dynamic Andhra

ANDHRA PRADESH is making rapid progress on the industrial and agricultural fronts and it is likely to become the foremost state in the southern region through balanced economic growth and making the best use of its resources. The trigger to the new phase of expansion of industries and the spurt in agricultural production has been the new emphasis on power generation and the development of command areas of major irrigation systems. There was really no excuse for the earlier slow progress of Andhra Pradesh though it may be said that the unhelpful attitude of the centre in regard to the financing of the Nagarjunasagar project and the turmoil for some time over the Telengana issue were mainly responsible for the near-stagnation of the state for over a decade.

The new phase of development began during the Vengala Rao ministry and the policy of seeking the help of industrialists from other parts of the country and promoting new enterprises in the private or joint sectors with state's participation has paid good dividends. The central government too has hastened the rate of growth with its maximum investment in the Ramagundam coal-based fertiliser project, the zinc smelter at Visakhapatnam using imported concentrates, the outer harbour in the same area and the super thermal station at Ramagundam. The Hyderabad and Visakhapatnam complexes have grown greatly in importance and the former area particularly may become highly developed after the Vizag steel plant comes into being and ancillary industries grow around it.

boost to coastal region

The prosperous coastal districts, however, have not had their due share of industrial capacity and it has been only later that the scope for new development has been explored for promoting new enterprises. The Nagarjunasagar fertiliser project at Kakinada has taken a long time to get beyond the blueprint stage. The cost of the project has in the meantime escalated sharply and the total outlay may exceed Rs 250 crores—it may be even nearly Rs 300 crores unless the construction period is reduced or the scope of the project revised. Shaw Wallace, the joint promoter, was haggling over a larger quota for distribution of fertiliser with a view to offsetting the increase in cost of participation in equity capital. The difficulties in this regard are being overcome with the assistance of Zuari Agro Chemicals. If this project takes shape, the coastal area development would have been given a boost.

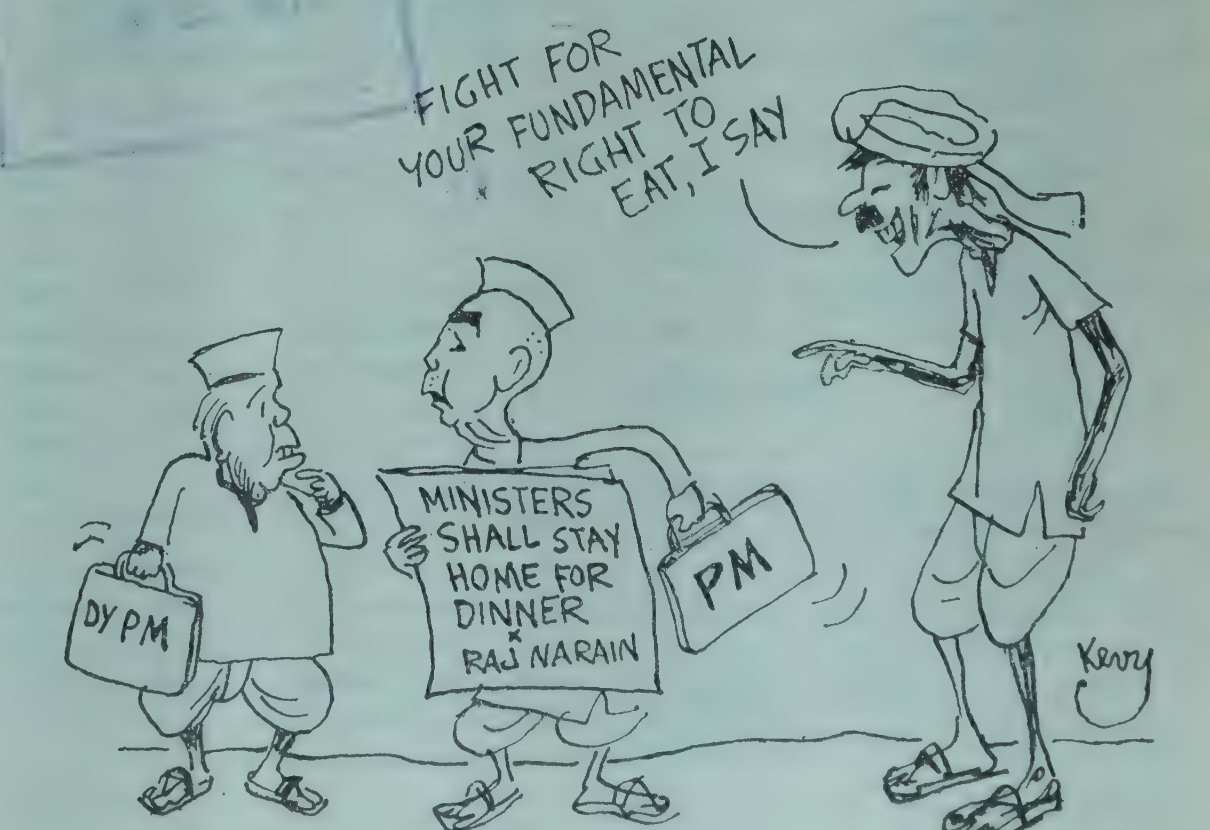
The huge paper mill near Rajahamundry is a product of the helpful state participation and the cooperation of prominent industrialists from Bombay. A large sized plant for manufacturing milk products by HMM (formerly Hindustan Milk Foods) has started functioning in the same area, while the industrial complex of Andhra Sugars is diversifying unnoticeably with activities in various directions. The sugar mills in this region can be suitably enlarged with proper attention to cane cultivation. It will also be desirable to pay greater attention to the manufacture of industrial alcohol-based products, as is being done at Tanukku. The large sized sugar factory of KCP in Krishna district is yet to utilise its output of molasses as by-product usefully, by undertaking the production of acetate chemicals and the like. The unit for producing dry cells at Nellore, of course, will be doubling its capacity as it has fared remarkably well latterly.

Elsewhere, important developments are taking place with the commissioning of the new thermal plant near Karnool and the completion of another plant at Bhadrachalam. The state will soon be accounting for nearly 20 per cent of the output of paper and boards in the country. Some small sized units using agricultural waste are also being set up in different centres. The cement industry will be expanding ambitiously, as the existing units are installing additional capacity and new units are proposed to be promoted in the Rayalaseema region.

The chief minister, Mr Chenna Reddy is also keen on implementing the scheme for establishing a tyre plant and improving the health of the unit manufacturing bearings of different types with Japanese collaboration. Negotiations are under way for starting a tyre plant in the joint sector, while the bearings plant might be taken over by a prominent industrial group of Tamil Nadu if the negotiations now going on prove successful. The existing units like Hyderabad Allwyn and Republic Forge are also having plans for diversification.

There will be no dearth of financial resources as it has been amply demonstrated that the required funds will be forthcoming if only new projects are conceived imaginatively and the support of the local population is enlisted properly. The Rayalaseema Paper Mill has been brought into being within a remarkably short period and the subscription to equity capital has been secured with funds from the investors in the region and the state.

The Andhra Pradesh Industrial Development Corporation (APIDC) has been doing commendable work in the past few years and the policy of limited financial participation in new ventures along with the entrepreneurs in the private sector has been mainly responsible for the development of the Pattancherru area near Hyderabad and the Kothagudam region. The agricultural sector also should be strengthened systematically for feeding the agro-based industries with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the required raw materials and providing also the badly needed financial resources. If the new momentum is fully sustained, Andhra Pradesh may be successful in achieving a rate of growth which will be difficult of emulation by neighbouring states.

Power plentiful

FROM SERIOUS power shortages till about five years ago, Andhra Pradesh has emerged as a power surplus state. This should augur well not only for its agricultural development but also industrial growth.

The installed generation capacity in the state aggregated to just 615 MW at the beginning of the fourth Plan in 1969. The five years of this Plan saw an addition of another 62.5 MW, raising the installed capacity by the end of March, 1974 to 658 MW. The subsequent years witnessed a very rapid progress. The addition to capacity between 1974-75 and 1978-79 has been as large as 1,010 MW through the commissioning of the following projects:

1974-75	Kothagudam Stage-III (2×110 MW)	220 MW
1975-76	Lower Sileru Ist Unit (1×115 MW)	115 MW
1976-77	Lower Sileru 2nd and 3rd Units (2×115 MW)	230 MW
1977-78	(a) Nagarjunasagar Hydro-Electric Station	110 MW
	(b) Kothagudam Stage-IV (2×110 MW)	220 MW
1978-79	Lower Sileru 4th Unit (1×115 MW)	115 MW
	Total	1,010 MW

This undoubtedly is a unique performance by Indian standards. After Uttar Pradesh, where the addition to capacity during the four years to 1977-78 had been around 1,221 MW, the next largest addition was in Andhra Pradesh—around 895 MW. During the five years to 1978-79, the growth in capacity in Andhra Pradesh has been of the order of over 150 per cent. Normally, in Indian conditions, capacity is doubled over a period of seven to eight years.

There has been not only large addition to the installed capacity in Andhra Pradesh, the generation performance also has improved significantly. The dividends have been handsome: no restrictions on consumption of power. The mix of the installed capacity too is quite judicious—of the 1,678 MW aggregate capacity, 838

TABLE I

Projects to be Commissioned by 1982-83

Year	Name of the project	Additional capacity MW
1979-80	Vijayawada Thermal Station (Two units of 210 MW)	420
1980-81	Srisailam Hydro Electric Scheme (I & II Units of 110 MW)	220
1979-80	Nagarjunasagar Pumped Storage Scheme (I and II Units of 100 MW)	200
1980-81	Nagarjunasagar Pumped Storage Scheme (III and IV units of 100 MW)	200
1981-82	Srisailam Hydro Electric Scheme (III and IV Units of 110 MW)	220
	Nagarjunasagar Right Canal Power House (2 Units of 30 MW)	60
	AP Power House at Balimela/(first unit of 30 MW)	30
	Donkarayi Canal Power House (first unit of 25 MW)	25
	AP Power House at Balimela (second unit of 30 MW)	30
1982-83	Srisailam II Stage (2 units of 110 MW)	220
	Nagarjunasagar Pumped Storage Scheme Stage-II (first unit of 100 MW)	100
	Total	1,725

TABLE II

Increase in Installed Capacity of Power in Various States Between 1973-74 and 1977-78

S. No.	State	Installed capacity (MW) 1973-74	1977-78	Addition in 4 years	% of increase
1.	Andhra Pradesh	668	1,563	895	134
2.	Assam	102	152	50	49
3.	Bihar	588	780	192	33
4.	Gujarat	883	1,711	828	94
5.	Haryana	499	742	243	49
6.	Karnataka	967	1,145	178	18
7.	Kerala	622	1,013	391	63
8.	Madhya Pradesh	775	1,135	360	46
9.	Maharashtra	1,819	2,626	807	44
10.	Orissa	682	923	241	35
11.	Punjab	714	1,257	543	76
12.	Rajasthan	539	718	179	33
13.	Tamil Nadu	1,224	1,824	600	49
14.	Uttar Pradesh	1,538	2,759	1,221	79
15.	West Bengal	1,316	1,385	69	5
		12,936	19,733	6,797	53 All India Average

MW is hydel and 840 MW thermal. This has made the state less prone to the vagaries of monsoons. The situation, however, may have to be modified in the long run with a slightly greater reliance being put on thermal generation. During the current (sixth) Plan period, of course, the generation mix will not change much as the projects to be commissioned to a total capacity of 1,725 MW by 1982-83 will reveal (*see* Table I, Page 214).

Significantly enough, the hydel power planning in the state has been done in such a way that in the event of failure of monsoons in the eastern ghats area of the Godavari basin, the impact would be mitigated considerably through supplies from the hydel stations receiving water from the catchment areas of the western ghats. For this purpose a 420 MW capacity project is being implemented at Srisailam based on the river Krishna.

With the addition of the above 1,725 MW capacity, the total generation capacity in Andhra Pradesh, after retiring old sets of 68 MW, will go up to 3,335 MW. Of the current Plan schemes, the first unit of 210 MW Vijayawada thermal station has already been completed. The second unit of similar capacity here is expected to go on stream by December. The capacity will get augmented further this year when the first and the second units of 100 MW capacity of the Nagarjunasagar pumped storage scheme are commissioned next month and in March next. The effective generation capactiy available by the end of this year thus, will be 2,230 MW. The next three years will witness additions to capacity to the extent of 400 MW, 365 MW and 320 MW.

Besides the above capacity from the state projects, Andhra Pradesh will have 400 to 500 MW share in the 1,100 MW (first stage) Ramagundam super thermal station. The current Plan period, therefore, may see the installed capacity in the state being more than doubled.

The power supply in Andhra Pradesh should continue to be easy for a number of years. The present load is of the order 1,060 MW, against an installed capacity of 1,678 MW. The anticipated maximum demand by 1982-83 is put at 1,807 MW. By that time, the capacity of the state projects alone would have grown to 3,335 MW. If the first phase of the Ramagundam super thermal station is also completed, by then, as expected, the installed capacity falling to the share of Andhra Pradesh would have grown to 3,835 MW.

The Andhra Pradesh State Electricity Board, which has at its head the dynamic Mr Tata Rao, deserves commendation for the efforts it has put in for augmenting the installed capacity as well as for improving the performance of the existing units.

West Bengal can export more

IN A survey of West Bengal's export potential, conducted recently, the Indian Institute of Foreign Trade has identified several products which have good scope for export. It has estimated that West Bengal's exports in 1977-78 were of the order of Rs 1050 crores, an increase of 33 per cent over 1975-76. It has prepared a list of several items whose total exports can be stepped up from Rs 72.24 crores in 1977-78 to Rs 201.15 crores in 1982-83. These include marine products, handicrafts and handlooms, chemicals and related items, engineering, leather-based goods, sports goods, minerals and forest based goods.

The full text of the survey is yet to be released. But it is not clear as to what extent some of its major recommendations will actually help West Bengal to impart a strong stimulus to export promotion. For instance, how far will the Export Development Corporation, suggested by the institute, be able to provide some dynamism to the state's export drive? This corporation is expected to minimise the operational expenditure on export marketing activities, help small industries to build up their production base and augment the supply potential, and maintain effective liaison with export promotion councils and government departments. But the corporation can play its role only if the state government takes a keen and continuous interest in export promotion.

The survey has revealed that the state government's export promotion cell,

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Price Rs 2,50

IN THE NATION 211-217
Charan's Cabinet
Dynamic Andhra
Power Plentiful
West Bengal Can Export More
Modernisation at Snail's Pace
Leather Export Boom
Tea : Beating About the Bush

WINDOW ON THE WORLD 218-221
Denationalisation in Britain ?
World Trade Trends
Election in Nigeria
Cost of Removing Idi Amin
Homes for Boatmen

SPECIAL FEATURE 222
Engineering Exports : Ambitious Plans

POINT OF VIEW
US Economy : Portents of Hard-landing—*Sudhir Sen* 228
Cardamom Needs a Shot in the Arm—*A. R. Patel & V. K. Madaliya* 231

TRADE WINDS 234

COMPANY MEETING 238
The Tata Iron and Steel Co. Ltd.

COMPANY AFFAIRS 241

RECORDS & STATISTICS
Petrochemicals : Progress and Prospects 249
New Central Council of Ministers 252

set up in 1964, has become practically defunct. It was supposed to collect and disseminate marketing and commercial information and render assistance to exporters in regard to export procedures, documentation, incentives and so on. But, says the survey, the cell "has not been able to project itself properly both to the industry as well as the policy planners in the government in an effective way". Does this not show the state government's apathy to export promotion? How is this attitude to be changed? Unless the government becomes fully aware of the contribution that export can make to strengthen the state's economy, the establishment of the proposed corporation will not have the desired impact. The corporation also may go the way of the export promotion cell.

The institute has made several suggestions for offering more incentives for promoting exports. But most of these proposals will involve considerable loss of revenue and therefore may not be favourably considered. For example, the subsidy on installing captive generators is to be raised from 25 to 50 per cent; the import duty is to be waived on their import: the excise duty on fuel is to be remitted; and the additional employment subsidy is to be increased from 15 per cent to 25 per cent with a ceiling of Rs 7.5 lakhs per year. Further, the cost of feasibility study, in the form of an unsecured loan, is to be met up to 100 per cent. Is Dr Ashok Mitra likely to examine these proposals sympathetically? In any case, most of the small-scale units will not be available to take advantage of them because of the high cost of generators as well as their maintenance.

urgent need

The institute has rightly suggested that there is an urgent need for generating an investment climate in West Bengal. For this purpose, the institute wants the central government to start at least two industrial undertakings of its own in each of the eight growth centres in West Bengal. Even if New Delhi agrees to do so, it will not be of much help to improve the investment climate unless the policy towards the so-called large houses becomes more realistic and the restrictions on industrial licensing, based on ideological considerations, are relaxed. But it is for the government of West Bengal to take the major initiative in creating a climate congenial for investment. It should tackle the problem of power shortage with far more seriousness and also bring about harmony in industrial relations. Export promotion cannot be encouraged in isolation. The institute should have clearly highlighted this aspect in its survey.

Modernisation at snail's pace

THE MODERNISATION programme of the Indian jute industry has been making very slow progress. According to official sources, so far only three mills in West Bengal have availed themselves of the soft loans offered by the financial institutions. Four mills have declined this facility and 11 are yet to make up their mind as to whether they should accept it. The Industrial Finance Corporation, the Industrial Development Bank of India and the Industrial Credit and Investment Corporation of India had offered nearly Rs 40 crores to 18 jute mills.

The reluctance of the mills to take advantage of the soft loan scheme is said to be due to some of the stringent conditions imposed by the financial institutions such as the appointment of the latter's nominees on the board of directors as well as internal auditors. But in view of the urgency and importance of implementing the modernisation programme, the government should reconsider these conditions so that more mills can benefit from it. With the revival of foreign demand for jute goods in recent months and the need to maximise the earnings of foreign exchange, the time has come to strengthen the industry's competitive capacity. Indian jute goods till recently had lost their hold in many major markets because of their inability to face the challenge from synthetics and Bangladesh. The government of India, therefore, should create such conditions as will help to improve the profitable working of the mills so that they will have greater incentive to equip themselves with the most modern machinery.

The latest annual report of the central ministry of Industry has disclosed that the modernisation scheme of the mills of the National Textile Corporation, for which an investment plan of Rs 203 crores has been envisaged, is being implemented in a phased manner and that it is being financed by budgetary support and by the IDBI. As a result, the off take of the textile machinery from indigenous sources has been of the order of Rs 20 crores per year. But the report does not say anything about the modernisation of the jute mills. The ministry of Industry should take greater interest in this programme and provide more positive and substantial assistance.

plea for imports

For instance, the non-availability of jute machinery from indigenous sources is said to be a major handicap. The industry, therefore, has suggested that the government should remove the ban on the import of such machinery. The government should favourably consider this proposal. Besides, it should facilitate the rationalisation of the labour force. If the mills are to carry excess labour, they are unlikely to be enthusiastic about modernisation. In view of the acute inter-union rivalry, it remains to be seen to what extent labour will readily cooperate with the mills in carrying out their schemes of modernisation.

It is worth recalling that, despite the paucity of funds due to uneconomic working, the jute industry had invested, since 1958, about Rs 135 crores as capital expenditure in modernising and renovating their machinery. This shows that the industry is not indifferent to this vital problem. The government, therefore, should examine the industry's genuine difficulties and provide it with all the assistance it needs so that all the mills can be fitted with the latest machinery at an early date. The industry had suggested sometime ago that the government should earmark about 50 per cent of the amount collected as excise duty on jute goods solely for subsidising this programme. The government should review the working of the programmes and modify its schemes of assistance suitably so that the industry can maximise its contribution to the earnings of foreign exchange,

Leather export boom

THE EXPORT Promotion Council for Finished Leather and Leather Manufactures feels that foreign exchange earnings from leather and leather products this year can be stepped up to around Rs 400 crores, if not more. Last year, they went up to nearly Rs 345 crores from Rs 257.92 crores in the previous year, reflecting an increase of 35 per cent. It may not be possible to repeat this growth performance percentage-wise, but even then a substantial increase can be attained easily in view of the encouraging world market trends.

During the first two months of the current financial year, these exports are stated to have maintained the last year's growth rate. They aggregated to Rs 63.08 crores, as against Rs 46.62 crores during these two months last year. The exports of finished leather increased by 69 per cent to Rs 37.86 crores from Rs 22.37 crores and those of footwear and components by 40 per cent to Rs 4.31 crores from Rs 3.76 crores. In the semi-finished category, the earnings from E.I. tanned hides and skins registered a growth of 14 pet cent to Rs 14.50 crores from Rs 12.73 crores, but those from chrome tanned leather showed decline to Rs 3.86 crores from Rs 5.83 crores. The exports of leather goods and industrial leather manufactures yielded Rs 2.42 crores, as against Rs 1.82 crores.

The council is of the view that this year's target for the shipments of leather and leather goods should be set at Rs 390 crores—Rs 190 crores for finished leather, Rs 120 crores for E.I. tanned and wet blue chrome hides and skins, Rs 50 crores for footwear and components and Rs 30 crores for other leather products. A recommendation to this effect is stated to have already been made to the ministry of Commerce which is expected to decide the matter in the near future.

Efforts continued to be made at collaboration with the members of the European Economic Community for the manufacture of quality leather products suited to their requirements. Some product groups have already been identified for this purpose. These include leather garments, travel and other light leather goods, harness and saddlery, and industrial and fashion leather gloves. The collaboration being sought is mainly for designing and improving of production techniques. Long-term marketing arrangements are also envisaged.

Tea: beating about the bush

THE GOVERNMENT of India has entrusted the Tea Manufacturing and Marketing Consultants Private Ltd, Calcutta, with the task of conducting a techno-economic survey of the tea industry in Darjeeling. Based on the findings and recommendations of this survey, the government proposes to approach the World Bank and the Asian Development Bank (ADB) for financial assistance for reviving the tea gardens in Darjeeling. The consultants have issued a questionnaire to the tea companies, seeking information on various aspects of the industry .

The questionnaire is fairly comprehensive and it is expected that the tea estates will furnish all the data asked for. But it is pertinent to ask whether the Tea Board does not already have all the relevant details regarding the performance and prospects of the Darjeeling tea industry.

For instance, the tea companies have been asked to indicate their production for the last five years, the trends in the average yield per hectare, the new plantatings carried out from 1974 to 1978 and so on. If the Tea Board does not have adequate data on these aspects, it can only mean that it has not been maintaining a close watch on Darjeeling tea, despite its importance to the country's economy.

It seems strange that the government should now approach the World Bank and the ADBank for assisting the tea gardens in Darjeeling after their economic working has been seriously crippled by its own policies. It is true that the World Bank has helped the tea industry in Kenya and Indonesia but, so far as India is concerned, the fact remains that had New Delhi taken correct and timely decision relating to the levy of excise duty, export duty and other imposts, and had the Tea Board also exercised constant vigilance, the sickness of the Darjeeling gardens could have been averted or its impact substantially reduced. For example, the export duty at the rate of five per cent had imposed a heavy burden since about 90 per cent of the tea produced in Darjeeling is exported. Similarly, the excise duty has also been kept at a high level. The Indian Tea Association said in March this year that it was "terribly disappointed that the budget had no proposal to give Darjeeling some special treatment or at least to abolish the excise duty which, in the present circumstances, is punitive as far as Darjeeling is concerned".

significant facts

It is also significant to note that labour productivity in Darjeeling is far too low. The annual average output per worker here is said to be only 285 kgs, compared to 745 kgs in Tamil Nadu. The average yield per hectare in Darjeeling is less than 700 kgs, compared to the All-India average of 1400 kgs. The number of workers employed per hectare in Darjeeling is 2.44 whereas it is only 2.00 in Kerala.

The problem of reviving the tea industry in Darjeeling, therefore‘ has to be tackled simultaneously from various angles. Assistance from the World Bank and the Asian Development Bank can produce the desired results only if New Delhi's policies are suitably modified so so as to enable the tea industry to earn more profits and plough them back for development purposes. The leisurely approach adopted by the government of India seems to indicate a lack of seriousness in dealing with the problems of the tea industry in Darjeeling.

Denationalisation in Britain?

THE CONSERVATIVE government in Britain is trying to fulfil its election pledges by reducing government investment in the public sector. The government proposes to offer nearly half of the shares in the state-owned British Aerospace group to public investors, and to make the group borrow in future as far as possible from commercial sources. These decisions could cut the government's public spending eventually by several hundred million pounds. This does not, however, mean that there is any intention to break up the group, and offer separate parts of it for sale to individual buyers, Sir Keith Joseph, Industry secretary, made clear in a Commons annuoncement recently.

British Aerospace, which has assets of over £300m, was created two years ago by the nationalisation of British Aircraft Corporation, Hawker Siddeley Aviation, Hawker Siddeley Dynamics, and Scottish Aviation. Legislation is to be introduced before Christmas to change the status of British Aerospace from a statutory corporation to a limited liability company, under the Companies Act. Initially, the government would hold all the shares, but eventually up to about half would be offered to outside investors, including the group's 70,160 employees. There would be "a complete safeguard" against any significant purchases of shares by foreign competitors, although individual foreigners would be able to buy shares.

The government will continue to appoint the chairman and directors but will not intervene in the administration of the company as a commercial concern. It was also revealed that British Aerospace's present structure was sound and proving successful. It was stated that the board had consistently maintained to the government that whatever changes in ownership may be devised, the present structural base was best fitted for the internationally competitive business of Aerospace. The board had also made it clear that any new proposal should be broadly acceptable to the major political parties and workforce. Continuity of operation was an essential ingredient in this long-term business, it was stated.

Mr John Silkin, the Labour Shadow Industry secretary, disagreed with the government move and stated that the strengthening and not the weakening of the publicly-owned industries was vital to the economy. He warned that a future Labour administration might take back into public ownership any shares in British Aerospace which might be sold off by the present government. In the heated exchanges which followed, several left-wingers went further than Mr Silkin and said they would be campaigning to ensure that the next Labour government takes back the shares without compensating the private investors.

The Aerospace Staff Liaison Committee, representing 5,000 professional, managerial and allied employees in British Aerospace, however, made it clear that it held no doctrinaire views on the government's plan. But it was essential that stability was maintained in the industry. The committee also made it clear that it would object to any profitable parts being sold off to the detriment of the less profitable parts.

The state-owned airline, British Airways (BA), made a pre-tax profit of £110m (£77m after tax) in the year ended March 31, 1979. This compared with £79m (£37m after tax) in 1977-78. The BA annual report revealed an increase of 0.5 per cent in passenger loadings, and an eight per cent increase in cargo carried. BA's air freight services in Europe showed a rise of 25 per cent, helping to boost revenue from cargo operations to more than £131m—£16m more than in the previous year.

The chairman of the airways, Mr Ross Stainton, stated recently that BA was conducting active investigations into methods of reducing the fuel consumption of its existing fleet by improved flight planning and computerised flight management systems. "During the coming winter we have undertaken to cut back our previously budgeted fuel requirements by 5 per cent" he added. Early next year, BA takes delivery of the first of a new fleet of Boeing 737 twin-jet planes which will take over routes currently operated by three-engined Tridents. On high-density routes this could result in a 25 per cent fuel saving, Mr Stainton said. In addition, the airline is modifying the Rolls-Royce engines of its Lockheed Tristar—500 aircraft to reduce fuel consumption by seven per cent. At today's prices, this is estimated to save £500,000 worth of fuel for each aircraft in a year's operation.

World trade trends

THE DIRECTION of Trade Yearbook, 1979, published recently by the International Monetary Fund, has revealed important changes in the value and structure of trade among the world's trading areas in 1972-78. The effects of these shifts on the trade balances, including the cost of freight and insurance payments on imports, of the major trading areas have been shown in the table given belw. For instance, there is a decline in the industrial countries' trade deficit with their trading partners, a smaller decline in the trade deficit of other European countries (Finland, Greece, Iceland, Ireland, Malta, Portugal, Romania, Spain, Turkey and Yugoslavia), a pronounced drop ($21.5 billion) in the surplus of oil-exporting countries and a sharp rise in the deficit ($17.4 billion) of other developing countries with the rest of the world in 1978.

Between 1972 and 1978 the aggregate trade deficits of the developing countries of the western hemisphere, Asia and Africa increased by $10.5 billion, $8.8 billion and $5.8 billion, respectively. The largest increase ($10.7 billion) was that of the developing countries of the middle-east (excluding oil exporters), whose trade deficit with industrial countries went up from $2.8 billion in 1972 to $13.5 billion in 1978.

During the years 1972-78, the industrial countries steadily improved their trade surpluses with other European countries and with non-oil exporting developing countries, accumulating total surpluses of $74.4 billion and $46.9 billion, respectively, in the seven-year period, including surpluses of $10.9 billion and $11.0 billion in 1978. In their trade with oil-exporting countries during 1972-78, the industrial countries experienced annual trade deficits that rose from $10.9 billion in 1972 to a peak of $60.2 billion in 1974 and fell in the subsequent years to $40.0 billion, $50.5 billion, $50.7 billion and $36.7 billion.

In the seven years ending December 31, 1978, the oil-exporting countries accumulated total trade surpluses amounting to $329.4 billion, comprising surpluses (including the cost of freight and insurance payments on imports) of $207.6 billion, $25.5 billion, $98.0 billion and $1.2 billion with the industrial countries, other European countries, developing countries and Australia, New Zealand and South Africa, respectively. The oil-exporting countries' trade surpluses with the developing countries in 1972-78 were largely ($66.4 billion) with western hemisphere nations, whose trade deficits with the oil-exporting nations rose from $2.1 billion in 1972 to $13.0 billion in 1978, owing partly to the import of crude oil for processing and re-export by the region's refineries.

It is revealed that during 1978 world exports increased by $161.4 billion or by nearly 16 per cent, to a total of nearly $1.2 trillion. This was more than three times the 1972 value of world trade. While all areas of the world contributed to this increase—with the exception of the oil-exporting countries, whose exports fell by $3 billion to $141 billion—the major share ($135.5 billion) of the rise was contributed by the industrial countries.

The non-oil exporting developing countries' share of total world exports fell in 1978 after rising in each of the two previous years. Although the developing countries' exports went up by 13.3 per cent to $203.2 billion in 1978, their imports jumped by 21.3 per cent to $203.2 billion, raising their trade deficit by $17.4 billion to $47.2 billion in 1978. A major share of the increase in their deficit was attributable to their trade with industrial

Trade Balances of Major Trade Areas with the Rest of the World

(billion US dollars)

	1972	1973	1974	1975	1976	1977	1978
Industrial Countries	—5.2	—10.0	—40.8	—8.3	—34.5	—42.0	—22.9
Other Europe	—8.1	—11.6	—22.8	—24.2	—23.0	—25.0	—22.2
Australia, New Zealand, South Africa	1.9	3.2	—1.7	0.4	0.9	3.2	3.3
Oil Exporting Countries	10.9	19.2	81.8	54.5	66.7	58.8	37.5
Less Developed Countries	—11.3	—12.5	—33.0	—42.7	—28.2	—29.8	—47.2
Other Western Hemisphere	—3.9	—3.8	—13.6	—16.0	—12.1	—9.0	—14.4
Other Middle East	—2.8	—4.3	—6.6	—9.3	—8.7	—11.6	—13.5
Other Asia	—3.9	—4.2	—12.5	—13.5	—5.4	—5.6	—12.7
Other Africa	—0.7	—0.1	—0.3	—3.9	—1.9	—3.5	—6.5

Source : IMF Direction of Trade Yearbook, 1979 countries, with which they ran a trade deficit of $25.1 billion in 1978, compared with $10.0 billion in 1977. The balance of the developing countries total trade deficit of $47.2 billion in 1978 was almost entirely with the oil-exporting countries

Election in Nigeria

Voters in Nigeria recently had their first taste of democracy for 13 years when they went to the polls in a series of five ballots for a US style government with an executive president. The five parties involved in the elections fielded a total of 6,173 candidates for the presidency, the Federal Senate and the House of Representatives, state governorships and the state Houses of Assembly. All the candidates were screened to check on their honesty and suitability, a process which disqualified 2,555 persons. The disqualification of one of the five presidential candidates caused some violence in the northern town of Kano. The party wished to appeal against the ruling and kept Alhaji Aminu as its leader for the elections. The screening had been done by the government appointed but independent Federal Electoral Commission (FEDECO). It is this body which supervised the organisation of the election, including the erection of 97,000 polling booths up and down the country and the distribution of millions of voting slips.

The first election was for the 95 members of the Federal Senate, to be followed on successive Saturdays by voting for the 449 members of the Federal House of Representatives, 1,347 members of the House of Assembly in each of the 19 states and the election of a governor for each of the states. Then on August 11 there will be an election for the federal executive presidency, seen as crucial because of the wide ranging powers which the president will have under the new constitution. The constitution requires that to be elected on the first round the candidate must not only have the largest number of votes, but also one quarter of the votes in two-thirds of the states. If, as seems likely, no candidate achieves that figure, an electoral college, composed of the two federal bodies, the Senate and the House of Representatives, will select the president.

Alhaji Shehu Shagari, the presidential candidate of the National Party of Nigeria (NPN) expressed disappointment recently at the strong showing of ethnic loyalties in the first round of voting in the general elections. Alhaji Shehu's NPN was leading the field, with the Unity Party of Nigeria (UPN), headed by Chief Obafemi Awolowo, close behind. In third place was Dr Nnamdi Azikiwe's Nigerian People's Party (NPP). None of the parties can now win an absolute majority, because each party has performed best in the region from which its presidential candidate comes. The NPN has taken most of the northern states, the UPN the western states and the NPP the old Ibo heartland of the east.

reviving past practice

The inconclusive results reveal that the business of forming alliances must now begin. The election of an executive president, who will have wide powers, is set for August 11. To stop Shehu Shagari, Mr Azikiwe and Chief Awolowo may have to join forces, as they did in 1964, in a vain attempt to topple Sir Abubaker Tafawa Balewa. Shehu Shagari himself will be looking for some arrangement with the two smaller northern parties. The ultimate revival of the past practice may be a Shagari-Azikiwe alliance. A coalition between the forces they represent formed independent Nigeria's first federal government, with Sir Abubaker as prime minister who was killed in a military coup in January, 1966.

It may be observed that the past year has seen an extraordinary improvement in Nigeria's oil fortunes. Not only have the recent OPEC price increases added a further 60 per cent to the value of a barrel of Nigerian crude but there has also been a dramatic increase in the level of production. The renewed vigour of the oil market and the recent price rises have given Nigeria back its confidence over its oil pricing policies. With improved economic base, a democratic Nigeria after the elections will definitely play an important role in Africa.

Cost of removing Idi Amin

While many democratic countries have praised the efforts of the Ugandan and the Tanzanian forces to liberate Uganda from the yoke of the tyrant Dada Idi Amin, they have not yet matched the praise with economic assistance to both Uganda and Tanzania, which have suffered heavily during the prolonged warfare. Both the countries have recently come up with plans for economic recovery.

Mr. Jack Sentongo, Uganda's Finance minister, has outlined a three-part reconstruction programme and has given notice of a possible moratorium on all public debt payments. He has also proposed a compensation commission to negotiate the claims of foreign governments, companies and individuals—including British Asians —arising out of nationalisation and expulsion under the Amin regime. The minister has appealed to donor countries and organisations to attend an aid conference set for the end of this month.

In view of the continuing shortages of basic commodities, he has warned: "It is political dynamite for us to have empty shops—every day that goes by is like a detonator." The minister who recently left the World Bank to take up his new post, has added that the economy is "in total ruins". Provisional overall balance of paynents figures show a deficit of Uganda Sh. 664.6 million (£42.8m). External commitments due but not yet discharged (public debt, service payments, oil bills) reached Sh. 887.8 m (£57.2 m) by the end of 1978. As on July 4, the Bank of Uganda's overall foreign currency reserves had a deficit of $600 m (£272m) and the government had decided to air lift 30,000 tons of coffee to help ease the situation. Coffee accounts for over 90 per cent of Uganda's export earnings.

Total long-term debt as on June 30

stood at Sh. 2.56 billion (£165 m). Estimated debt service (repayment and arrears) totalled Sh. 586 m (£37.8m) for the financial year 1980 and arrears totalled Sh. 472m (£30.45m).

The moratorium on all public debt payments will stay for two year and repayments may be resumed in 1980-81. Dealing with the reconstruction of the economy, the minister stated that the first phase would include immediate imports of basic commodities at a cost of Sh 800 m (£51.6 m).

The second phase will cover imports of petrol, agricultural, manufacturing and industrial needs.

The third part of the programme deals with capital expenditure and some developmental recurrent expenditure estimated at Sh 8.6 billion. Defence costs have been excluded from the programme.

Mr Edward Mtei, the Finance minister of Tanzania, told the national assembly recently that the government would raise taxes and reduce imports in a bid to put the economy back on its feet.

Tanzania's troubles

Tanzania's more than five months of fighting to oust the Ugandan dictator Idi Amin is officially reported to have cost the state £250 m. But economic troubles last year were accentuated by serious flooding in the coastal region which destroyed crops worth more than £800,000, washed away roads and bridges and destroyed homes.

Mr Mtei added that taxes would be raised on beer, sugar, cloth, wheat flour, air travel, car licences and those few imports which will still be permitted. Despite the tough measures, Tanzanians, who are already suffering shortages of rice, flour, cooking oil and imported goods, breathed a sigh of relief that the budget was not more austere.

The minister told the members of the house that Tanzania has a balance of payments deficit last year of £ 110m compared with 1977 surplus of £ 75 m. Donars of Tanzania's estimated £ 225 m in annual aid were asked to switch from help tied to specific projects to cash for essential imports, government subsidies are to be cut to the so-called parastatial (seminationalised) industries-except those producing goods for export.

Homes for boatmen

THE REPRESENTATIVES of western nations met recently in Geneva to find permanent homes for more refugees from Vietnam. The Geneva meeting, at which nearly 70 nations were represented, was suggested by Mrs Margaret Thatcher, the British prime minister. Her proposal subsequently had strong backing from the EEC and the countries of south-east Asia which have most seriously felt the strain of the massive flight from Vietnam of mainly ethnic Chinese. Nearly 380,000 Indo-Chinese refugees are now in camps around south-east Asia. Of these, about 165,000 have fled overland from Laos and Kampuchea into Thailand. Of the remainder, the "boat" refugees from Vietnam, 73,500 are in Malaysia, 43,000 in Indonesia and 66,000 in Hong Kong.

The Malaysian government had shocked the world when it declared on June 18 that no more Vietnamese boat people would be allowed to land on the Malaysian soil unless it received commitments from the west that the 73,500 refugees already in Malaysian camps would be accepted elsewhere. Malaysia has the support of Association of South-East Asian Nations (ASEAN), representing Thailand, Malaysia, Singapore, Indonesia and the Philippines. At a meeting of the ASEAN in Bali in late June, Malaysia won the support of its allies so that both Thailand and Indonesia agreed to close their doors to the newly arrived refugees.

Several countries have already offered active assistance. The US has agreed to double its refugee intake from 7,000 a month to 14,000 a month. Recently the British government agreed to accept a further 10,000 refugees. Australia is to take a further 10,500 in addition to the 24,000 already accepted, and Canada has agreed to increase its quota from 1,000 to 3,000 per month. Many other countries are expected to make new commitments as a result of the recent meeting in Geneva. China, for example, has made an undefined commitment to take more refugees. It has been estimated that more than 230,000 Vietnamese of Chinese ethnic origin (most of them from the north of Vietnam) have already fled into southern China.

Hanoi has tried to justify the situation by saying that the refugees from Laos and Vietnam are mostly the ex-employees of the previous administration and ex-servicemen who might find it hard to adjust with the new regime. Tens of thousands of Kampucheans were driven away by the Pol Pot bands as they retreated to the Thai territory. A large percentage of the refugees are ethnic Chinese. Moreover, a number of the refugees wish to reunite with their families who went abroad earlier.

Hanoi had made it known that all those who wished to reunite with their facilites or simply wanted to settle in another country would be allowed to do so in accordance with established procedure. The Vietnamese government has also taken steps to curb the sale of unseaworthy boats. The flow of refugees to south-east Asian countries has, therefore, begun to subside gradually. The prospect of at least mitigating, if not resolving, the refugee problem seems to be bright.

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davp 763(88)/79

Special feature

Engineering exports: ambitious plans

Exports of engineering goods currently constitute the most dynamic sector of our external trade. From a bare Rs 5.16 crores in 1956-57, they rose to Rs 115.77 crores by 1970-71, Rs 408.21 crores by 1975-76 and further to approximately Rs 685 crores last year. They are expected to exceed Rs 800 crores this year and touch the Rs 1,000-crores mark by 1980-81.

Along with the rapid increase in the exchange earnings from these exports, their composition as well as direction have undergone a material change during the past 23 years. We are currently exporting our engineering products to nearly all the regions of the world, excepting Latin America to where only small consignments have been shipped so far. South-east Asia, west Asia and Africa, of course, account for bulk of these exports, though the shares of western Europe, eastern Europe, North America and Australasia too have grown significantly in the recent years. Product-wise, capital goods and turn-key projects are assuming the leadership, the next important group being consumer durables. Sizeable quantities of steel and pig iron-based items are also exported. The accent, however, is on exporting high value added items to the extent possible.

Encouraged by the trends in the recent past, when the annual growth has been between 12 and 35 per cent, the Engineering Export Promotion Council is thinking in terms of raising these exports to as much as Rs 10,000 crores by 1990-91. Though ostensibly an over ambitious target, it is not considered unattainable if note is taken of the fact that the global inflationary tendencies may on an average, be of the order of 10 per cent per annum during the coming decade.

This piece by Mr R. C. Ummat reviews the progress of our engineering goods exports in the past and dwells upon the prospects of the 1980s. The plus as well as the minus factors which have to be contended with in the next ten years are also analysed.

THE PRIDE of place in our external trade currently has come to be occupied by engineering goods. From a bare Rs 5.16 crores in 1956-57, exports of engineering products increased to Rs 115.77 crores by 1970-71. By 1975-76 they had gone up to Rs 408.21 crores. They increased further to Rs 551.68 crores in 1976-77, Rs 632.96 crores in 1977-78 and approximately Rs 685 crores last year. Efforts are being made to raise them to over Rs 800 crores this year and as much as Rs 1,000 crores by 1980-81.

This performance, of course, will pale into insignificance if the ambition of the industry to raise them to Rs 10,000 crores by 1990-91 is realised. This projection will entail an annual growth of about 25 per cent. On the basis of 10 per cent growth a year, they are expected to go up to Rs 2,400 crores during the next ten years. A 15 per cent yearly growth will raise them to Rs 4,000 crores during this period and a 20 per cent growth to Rs 6,200 crores. The industry is thinking of making endeavours for the Rs 10,000 crores target.

Though ostensibly this target may appear to be over-ambitious, the explanations offered by the industry indeed suggest that it is realisable. The growth rate during the past five years has ranged between 12 and 35 per cent, despite the innumerable difficulties encountered. The 25 per cent annual growth assumes that 10 per cent will result, on an average, from global inflation. The remainder 15 per cent will be the growth in physical terms.

Along with the rapid strides these exports have witnessed during the last 23 years, their character as well as destination have undergone a material change. In the middle of the 1950s the engineering goods exports comprised primarily consumer durables (33.74 per cent), primary steel and pig iron-based items (32.87 per cent) and non-ferrous metal-based items (21.31 per cent). Capital goods accounted for just about 12.8 per cent of the then exports. By 1976-77, whereas the exports of consumer durables had grown to account for 34.08 per cent of the aggregate, those of primary steel and pig iron-based items came to account for 27.54 per cent and those of non-ferrous metals-based items to just 6.46 per cent. The exports of capital-goods and turn-key projects increased to as much as 31.92 per cent of the total figure. The subsequent two years have seen a further accentuation of these trends with capital goods and turn-key projects accounting for 38 per cent of the exports in 1978-79, consumer durables for 35 per cent, primary steel and pig iron-based items for 24 per cent and non-ferrous metal-based items a bare three per cent.

As regards the direction of trade, whereas the countries of south-east Asia, west Asia and Africa still continue to occupy a dominant place, accounting for nearly 71.5 per cent of total shipments in 1977-78, the shares of Europe (both eastern and western), the United States and Australasia have grown significantly to 19.05 per cent (east Europe 6.05 per cent, west Europe 13 per cent), 6.78 per cent and 1.52 per cent, respectively. In 1956-57, Asia accounted for 72.86 per cent of our total engineering goods exports, Africa for 23.23 per cent, Europe for 0.21 per cent, America for 0.36 per cent and Australasia for 1.38 per cent.

The above should show that the most significant development in the composition of our engineering goods shipments has been the rapid progress in the exports of capital goods and turn-key projects—civil engineering and construction works, consultancy services and joint ventures. Our civil engineering and construction concerns, both in the public and the private sectors, have been successful in winning an increasing number of contracts for building of houses, dams, roads, airport complexes, water supply systems, power houses, etc., in west Asia and elsewhere. Consultancy work of various kinds has been taken up in south-east Asia, west Asia and Africa. Joint ventures have been established in many countries abroad, mostly in the developing countries and a couple of them even in the developed ones.

Undoubtedly, the spur was provided to the exports of engineering products by the recessionary tendencies in our economy about a decade ago when faced with the continuous shortages of domestic orders for equipment and services, the industry looked for overseas markets. They received further fillip during the early years of the current decade in the wake of the oil price hike. A material change, however, has now taken place in the attitude of our entrepreneurs as well as those of the overseas buyers, especially from the developing countries, which augurs well for the future prospects. It has come to be increasingly realised by our exporters that they cannot build up exports on switch on and switch off basis and that the effort has to be an integral part of the overall production and sales policy. The Pokharan nuclear device implosion, whatever complications it created for our nuclear development programme, enhanced the image of the country as an alternative source of technology and equipment for the developing nations. The spate of inquiries from many African and Asian countries following the implosion bears testimony to this. Simultaneously, the government of India also has been making concerted attempts at putting these exports on a sounder footing through tuning of policies to cater for the requirements of exporters so that they can remain in this business.

Despite the impressive growth witnessed in the recent years, our share in the global trade in this line constitutes not more than 0.21 per cent. It has grown to this level from 0.12 per cent in 1973-74. The world trade in engineering goods has been going up in the past few years by about 10 per cent. If it continues to increase at this rate, as expected, it may reach $1,200 billion by 1990-91. A 10 per cent growth in our

TABLE I

Composition of India's Engineering Goods Exports

(Rs crores)

Product group	1956-57 Export	1956-57 % to total	1976-77 Export	1976-77 % to total	1977-78 Export	1977-78 % to total	1978-79 Export	1978-79 % to total
Capital Goods and Turnkey Projects	0.62	12.08	176.07	31.92	202.46	32.44	260.00	38.00
Primarily Steel and Pig Iron based Items	1.70	32.87	151.96	27.54	159.74	25.60	164.00	24.00
Non-ferrous based Items	1.10	21.31	35.66	6.46	24.81	3.98	21.00	3.00
Consumer Durables	1.74	33.74	187.99	34.08	236.95	37.98	240.00	35.00
Total	5.16		551.68		623.96		685.00	

exports will raise our share in the world trade to just 0.25 per cent. It, therefore, is well recognised that if we have to attain a respectable place amongst the community of engineering goods exporters, efforts will have to be multiplied fast.

Several developments in the world economy have to be contended with in our endeavours to accelerate the pace of exports of engineering products. With the exchange of the ratification documents in October, 1978, the peace treaty between China and Japan became a reality. This accord heralds a turning point in the history of Sino-Japanese relations. The trade agreement concluded between the two countries calls for Japan to export to China $7 to 8 billion worth of technology and industrial plants and $2 to 3 billion worth of construction materials and machines over the next eight years. The Japanese engineers, managers and workers are to train their Chinese counterparts in steel, textiles, plastics and electronic parts industries. China has also been recognised by the United States. This holds promise of considerable expansion in trade and industrial cooperation between these two countries. The west European countries, such as France, the United Kingdom and the Federal Republic of Germany, are also vying with one another to make rapid inroads into the Chinese market with offers of the latest technology and know-how. With the updating of its industrial sector, China, with its vast population, undoubtedly, is going to emerge as a mighty economic force in the world.

The expansion of the European Economic Community (EEC) as a result of the joining of the UK, Ireland and Denmark and the likelihood of Greece, Spain and Portugal embracing it in the near future, is another important development which will have a significant impact on the exports of engineering products from the developing countries to the members of the EEC.

The recent events in west Asia and Africa, particularly the political revolutions in Iran, Afghanistan, the Republic of Yemen, Ethiopia and Uganda are also throwing up new problems. The ASEAN countries too are coming closer to one-another and all-out efforts are being made by the developed countries to take advantage of their developmental plans.

Another very important tendency that is developing is the growing protectionism in the industrialised countries. Most of these countries, which were the fore-runners of free trade, are now vying with one another in putting up tariff and non-tariff barriers. The recent multilateral trade negotiations in Geneva have resulted in a package which is not free from protectionism, even though these negotiations were aimed at liberalising world trade from tariff and non-tariff barriers. Under this package, the rate of duty is proposed to be reduced to 33 per cent in a phased manner over a period of eight years. This will mean that the tariff margins and concessions which the beneficiaries of the generalised scheme of preferences are enjoying in the industrialised countries over the imports of the latter from the other industrially developed countries would gradually get eroded. It is felt that the results of the ambitious and long drawn out multilateral trade negotiations have been disappointing for the developing countries inasmuch as they have failed to provide supply of differential treatment or additional benefit to them in a meaningful manner and also to remove the vast array in tariff barriers effecting their exports.

The deliberations of UNCTAD-V, which was held at Manila recently, too have conclusively proved that the developed countries and the rich nations are more preoccupied with their own domestic problems even though some lip sympathy is being expressed by them for the betterment of those inhabiting the developing world.

There are, however, some rays of hope also in so far as the global factors affecting our engineering goods exports are concerned. The developing nations are increasingly realising that they should foster closer economic relations amongst themselves. There is also a growing appreciation of the fact that the technologies available in the advanced countries are not always suited to the requirements of the developing nations. They, therefore, are not averse to looking for assistance from countries such as ours which are in a position to make available adapted technology to suit the requirements of the developing countries. To some extent, the gradual shedding by the developed countries of the labour-intensive lines of production, because of their ever-growing wage bills, is also a development which

Our future exports of engineering goods would be greatly influenced by certain external factors like the emergence of China as a gigantic economic force, protectionist tendencies in the world, introduction of MFN and possible erosion of GSP benefits and political changes in some of the west Asian and African countries. Certain domestic factors which have cropped up recently like acute shortage of steel, complete dislocation of power situation, hopelessly inadequate and inefficient communication services, chaotic conditions at ports and shipping problems also will have their impact.

can be availed of by such countries as ours.

The domestic scene, of course, has created not a few problems for our engineering goods exports. Serious shortages have developed in respect of the supplies of steel which are necessitating large imports expected to be over 1.5 million tonnes this year. The power situation leaves much to be desired, especially in some areas where engineering industry is concentrated. The communication services have tended to deteriorate a great deal. The congestions at ports and shipping problems are too well known to be dwelt upon here at any length.

There are also problems of adhering to quality standards and delivery schedules without which exports obviously cannot be built up on a sound basis. Some problems as well arise from the hesitant approach at various levels in government towards exports. According to the Engineering Export Promotion Council (EEPC), more than the physical shortages of basic raw materials, it is the attitude of departments/officers towards exports which is a serious cause for concern. The same materials can be had for domestic consumption but not for export promotion. Priority of supply for export production seems to be a thing of the past.

Cumbersome procedures are invariably a great hindrance to the export effort. It is no exaggeration to say that in the competitive world, only aggressive marketing can succeed. This is all the more true when protectionist tendencies have emerged in the developed countries. Aggressive marketing can be undertaken if no undue impediments are placed in the way of exporters. Should they be placed, there can be little doubt that the lure of the domestic market, which is bound to grow with the pace of the development of our economy being stepped up, as envisaged, will wean many exporters or at least dissuade others from entering the export market.

This is of vital significance for the future of our exports. Although, as suggested above, there are progressive manufacturers who appreciate the need of continuing in the export market from the long-term interest of their own as well of the country, the number of regular exporters in the field of engineering does not exceed 250. Nearly 200 manufacturer-exporters account for roughly 66 per cent of our total engineering goods exports. This list has to be enlarged not only through prevailing upon the medium and small manufacturers whose products can find acceptance in the world market but, more important, in utilising the large potential of the public sector undertakings in the export field.

Some endeavours, indeed, have been made in this regard, but excepting a couple of public sector giants, others primarily cater for the domestic market. The giants which have made serious efforts at stepping up exports include the Bharat Heavy Electricals and the Engineering Projects India Ltd. Hindustan Machine Tools and Bharat Electronics also have made some progress in the international market recently. The Steel Authority of India, which had entered the export market in a big way while the domestic demand left much to be desired, has more or less withdrawn from this activity because of inadequate domestic production vis-a-vis requirements.

Incidentally, the exports of engi-

TABLE II

Direction of India's Engineering Goods Exports

(Rs crores)

Destination	1956-57		1976-77		1977-78	
	Export total	% to total	Export	% to total	Export	% to
Asia	**3.76**	**72.86**	**315.82**	**57.24**	**325.57**	**52.17**
South-East Asia	1.77	34.28	117.18	21.24	135.16	21.66
West Asia	1.99	38.58	198.64	36.00	190.41	30.51
Africa	**1.20**	**23.23**	**79.28**	**14.37**	**120.64**	**19.33**
Europe	**0.01**	**0.21**	**108.58**	**19.68**	**118.89**	**19.05**
East Europe	—	—	37.86	6.86	37.19	6.05
West Europe	0.01	0.21	70.72	12.82	81.70	13.00
America including Caribbean Islands	**0.02**	**0.36**	**36.45**	**6.61**	**42.30**	**6.78**
Oceanic Islands	**0.10**	**1.96**	**4.56**	**0.83**	**7.12**	**1.15**
Australasia	0.07	1.38	6.99	1.27	9.44	1.52
Total	5.16		551.68		623.96	

neering products from India have been essentially an Indian effort. The foreign collaboration arrangements have been acting as a drag on export endeavours of the undertakings concerned. This could not be seriously objected to when import substitution was the primary objective with which collaboration arrangements were allowed. But we have practically passed out of that stage and the foreign-assisted concerns obviously have to contribute their mite towards enlarging the export efforts.

The Engineering Export Promotion Council has recently engaged itself in drawing up the strategy for the next decade. It feels that not only a good deal of diversification in this export trade will have to be effected but also efforts will have to be directed towards cultivating new markets. With a view to avoiding the spreading of the efforts too thinly, it of course has suggested that greater attention should be paid to identifying specific items and markets.

India's Share in World Engineering Goods Trade

(US dollars billion)

Year	World export of engineering goods	Growth over previous year %	India's share %
1973	187.93		.12
1974	257.27	36.8	.18
1975	278.77	8.3	.18
1976	317.17	13.7	.21
1977	365.70	15.3	.21

So far as the latter is concerned, the EEPC is of the view that the oil-rich countries of west Asia and north Africa are likely to enjoy prosperity from their growing oil revenues at least for the next 10-15 years. Their development plans hold good promise for stepping up of our exports. The developed countries and also some of the developing countries such as South Korea have mounted an aggressive export drive in these regions. The Indian manufacturers too have to do the same, primarily through the consortia approach.

The non-oil producing developing countries of south-east Asia and Africa as well have ambitious plans to improve their economies by exploiting their natural resources. Indian technology is considered quite suitable for their requirements. The political goodwill that these countries have for India is an asset for our exporters provided they can improve their credibility by participating in trade fairs and exhibitions, through exchange of delegations and executing contracts in time to the fullest satisfaction of the buyers. In the case of these countries, the demand for consumer durables can be expected to gradually go down and the demand for capital equipment projects and infrastructure requirements would go up. The strategy, therefore, will have to be drawn up taking this fact into consideration.

Substantial increase in our exports is possible only if we are able to build up a good image for our country. One of the essentials for building up the image is timely execution of contracts to the fullest statisfaction of the buyers. This is possible only if export is treated as a national effort and not only the concern of the individual exporter or one department of the government. Timely execution of contracts is possible if all the inputs, be it supply of basic raw materials, be it power, internal transport, finance and shipping, are guaranteed.

The developed countries of both the west and the east, the EEPC feels, also will provide growing markets for labour-intensive consumer durables for steel-based items. These markets too can be cultivated, but care will have to be exercised to the effect that only competent units with proven performance undertake export business to these countries who can meet the scale of demand as well as the levels of quality. Some of these countries have already granted certain tariff concessions under the generalised scheme of preferences to the developing nations. These concessions should be availed of before they get gradually eroded as a result of the protectionist trends developing there.

The bilateral trade with the east European bloc, the EEPC thinks, is likely to be gradually replaced by multilateral trade. The long-term trade plans drawn up by some of the countries in eastern Europe need to be studied closely in drawing up a worthwhile programme for exports to these countries, particularly, by the units assisted by them.

The Latin American and the Caribbean countries, which has been practically ignored so far because of the long distance, too hold good scope for a wide range of projects and products. This potential can be exploited through strengthening our shipping services and making known to these countries our potentialities. The ASEAN region can be concertedly explored for a serious export drive to partake in this region's ambitious developmental programme.

As regards the composition of engineering goods exports, mention has already been made of the growing importance of capital goods and turn-key projects. It is stressed by the industry that ultimately nearly 50 per cent of our exports will have to be in the form of turn-key projects and capital goods. In view of

Capital goods and turnkey projects are going to play a very significant role in our exports during the next decade. Nearly 50 per cent of the exports will have to be in the field of capital goods and projects. An Empowered Project Committee in the ministry of Commerce should ensure that all the inputs needed for the execution of large value contracts are made available and that execution of contracts is regularly monitored by this committee so that causes for anticipated slippages are removed in time.

the switch back to coal as the base for energy in most countries, including the developed ones, there are very good prospects for the export of anti-pollution equipment which can be produced here at costs lower than in the developed world. The labour-intensive and other light engineering products can find good market in the industrialised nations for the same reason as the above, particularly because under the multi-trade negotiations, the governments of the industrialised nations are to make purchases worth $300 billion from the developing countries. Electronics is another major growth sector: so also transport equipment. Our industry can as well have sizeable export business in components of a wide variety.

The fears that we will soon be priced out in the world market because of the current, second phase, of energy crisis, as we have to depend on sizeable imports of petroleum products, seem to be unwarranted. The way the 1973 crude oil price hike has been absorbed shows that there is a good deal of resilience in our economy. But that does not mean that our fuel policy need not be rationalised.

The reservoir of skilled workers and technicians, who in the recent past have been obliged to seek employment abroad, can stand us in good stead in multiplying fast our exports of engineering products. The country has developed without any shadow of doubt the basic industrial background. The present significant under-utilisation of the industry's capacity, of course, provides some cushion for stepping up exports in the near future. But the anbitious programme envisaged for the eighties will require a massive growth of not only the industry itself but also of infrastructure and input facilities, including finance. The current Rs 8/9,000 crores output in the engineering sector will have to be raised to at least Rs 40,000 crores if exports have to be increased to Rs 10,000 crores by 1990-91. This, of course, is not considered beyond the capabilities of the country, provided financial infrastructure is strengthened.

It is erroneous to assume that exports are being planned or effected at the cost of the domestic market. In fact, a vast domestic market itself will be conducive to raising exports as in the process quality will go up and the manufacturers will have greater confidence in their competence to export. Besides the financial infrastructure, the other such fields which have to be strengthened markedly are power and shipping.

Estimation of World Engineering Exports from 1978 to 1990 on the Basis of 10 per cent Growth Rate

Year	Estimated export (In billion US$)
1978	401.61
1979	441.77
1980	485.94
1981	534.53
1982	587.98
1983	646.77
1984	711.44
1985	782.58
1986	860.83
1987	946.91
1988	1041.60
1989	1145.76
1990	1260.33
Say	1200.00

The needs of the industry of raw materials required for the export effort, of course, may not pose any insurmountable hurdles. The material requirements are by no means very large. If the supplies from the domestic market are inadequate at any time, they can be supplemented by imports.

The growth of engineering goods exports, particularly of capital equipment and turn-key projects, incidentally, should provide great fillip to our consultancy services. The turn-key projects, if undertaken jointly with the countries concerned, will also be a source of regular dividend remittances.

The cash compensation allowed to the industry against exports need not be frowned upon. It not only does not fully compensate for the unrecoverable taxes but is justified also in view of the significant cost involved in the export effort owing to governmental rules and regulations. A massive export effort obviously has to be on the basis of the unity of thought between the government and the exporters.

An all-out effort is needed to improve the image of the country in the export market and also to study closely the developments abroad which can be taken advantage of by our exporters.

The need for up-dating technology all through our engineering industry cannot be over-emphasised. If we have to push up exports of engineering products, the up-dating of technology has to be done on a continuing basis eiher through our own R&D efforts or import of technology. Some countries will be needing credit facilities also on the lines offered by the developed nations. These credits will have to be made available to the extent possible.

US economy : portents of hard-landing

Sudhir Sen

New York

All indicators point to the conclusion that the US economy is headed towards a hard-landing in rough weather. Though the Carter administration had forecast a modest real growth of around three per cent, it has, on mid-year estimates, conceded that a recession is now unfolding with joblessness rising to 6.5 per cent. How long the US economy will remain grounded, nobody can tell. Fed's crystal-gazing at this moment can only be a futile exercise.

For more than a year the overriding concern of the Carter administration has been to slow down the torrid pace of the economy, but at the same time to avoid a recession. The objective, to use the now-familiar jargon borrowed from aviation, was *soft-landing*. The Fed, too, applauded the goal and worked towards that end, trying to steer clear of excessive money-tightening despite the strong pressures frequently put on it. Many private economists readily agreed that the goal was not only laudable, but also achieveable.

Of late, however, the scenario has changed rather radically, owing mainly to a convergence of several fortuitous factors. A recession, which is generally defined as two back-to-back quarters of negative GNP growth, now looks inevitable, so much so that even the administration, after long resisting the use of the very word, is reluctantly veering to that conclusion. Indeed, many economists believe that the economy has already slipped into a recession, though the corroborating statistical evidence will take yet some time to surface. And so the focus of the debate has clearly shifted; it now centres not on whether there will be a hard-landing, but how hard will it be and how much damage it is likely to do; that is to say, on the length and depth of the coming recession, whether it will be "saucer-shaped" or "V-shaped".

As usual, the business cycle now in its penultimate phase has been sending out mixed signals. For example, two key statistics just reported for the month of June should, prima facie, look quite encouraging. The producer prices for finished goods rose only 0.5 per cent, seasonally adjusted, or at an annual rate of six per cent. Though slightly higher than May's adjusted 0.4 per cent rise, it was a big improvement over the first four months' increases when they averaged at over one per cent per month, or over 12 per cent annually. Unemployment in June fell to an adjusted 5.6 per cent of the work force, its lowest level seen in almost five years.

The administration has been careful not to read too much into these figures. Food prices, after soaring in the winter months, fell significantly in the second quarter, and this has helped keep the finished-good prices relatively low. The reprieve, however, is unlikely to prove more than temporary. The drop in food prices has been offset by stiff increases in the prices of non-food items at different stages of processing, largely because of the rising costs of energy. Besides, the lower food prices may not show up at the consumer level since they may be offset by higher costs of transportation, distribution and related services. And finally, the recent decline in food prices is likely to be reversed before long because of heavy grain purchases by Soviet Russia, mounting costs of petroleum and petroleum products including fertilizers, and seasonal increases during the winter.

As for June's unemployment rate, it reflects a sharp drop in teenage unemployment; and once this wrinkle is taken out, the figure reveals the symptoms of a slowing economy. The average weekly hours worked declined in June; there has been no rise in employment or in the size of the labour force since March; and the number of "discouraged workers"—people who are willing to work, but in despair have given up looking for jobs—soared in June, thereby reversing a two-year downtrend.

The strongest evidence that the economy has been losing steam comes from consumer spending, by far the largest sector that accounts for as much as two-thirds of the GNP. Based on consumer behaviour some private economists have been forecasting a recession for at least a year. They detected signs of weakness even when the economy continued to show surprising strength in 1978, especially in the fourth quarter which ended with a stunning seven per cent growth.

The rate was of course unsustainable. It was propped up by a surge in consumer credit at a time of high inflation and declining purchasing power. According to Geoffrey H. Moore, a leading business-cycle expert who heads the Centre for International Business Cycle Research at Rutgers University, the economy began to turn in the last quarter of 1978, at the very time the GNP showed the huge bulge. The charts of output, personal income and employment prepared in his bureau showed what Mr Moore called "the beginning of the growth cycle slowdown" in December.

increasing mortgage credit

This prognostication tallied with the views of other private economists, though still a small minority. The *Forbes* magazine, for instance, warned early in the year that the consumers who had been the mainstay of the current business expansion since it began around March 1975, would not be able to keep it going much longer because their real income was declining under the impact of double-digit inflation, and that they were already overextended and overburdened with debt. By the end of September 1978, consumer and mortgage credit, as the journal pointed out, had gone up to $995 billion from $856 billion a year earlier, or by a staggering sum of $139 billion in a single year. Repayment of debt as a percentage of disposable income, however, showed no increase over the year. It remained steady at 20.5 per cent, which was not much higher than what it was in 1969, although ten years ago the debt amounted to $397 billion. Clearly, American consumers had no trouble in borrowing handsomely even in times of high inflation.

In fact, inflation has spurred borrowing since "buying now"—even with high-interest credit—appeared cheaper than buying a year or two later, which was paticularly true of big-ticket durable items like automobiles. This, however, was tantamount to drawing a draft on the future. And so, while the high level of consumer spending financed with borrowings lengthened the life of the business cycle, it also undercut the prospects of soft-landing and paved the way to an inevitable slump. This reasoning led the *Forbes* economists to conclude, as early as January 20, 1979, that "the boom had already peaked" and the economy was about to slide into a recession. And if so, this would be "the most eagerly awaited and popular recession in history", they added.

deeper recession feared

This early pulse-taking not only proved correct, it has been reinforced by subsequent events which have given the economy a powerful thrust towards a deeper recession. First came a raw winter which made more than usual inroads into production and retail sales. This was followed by a truckers' strike which disrupted the movement of goods and gave a further push to the slowdown already under way while raising costs and prices, especially of perishable foodstuffs, a few more notches. Even more serious are the rising prices of crude oil and petroleum products which have been rippling through the economy since January.

On top of all this came the OPEC decision of June to jack up the crude oil prices by several dollars a barrel up to a ceiling as high as $23.50. It was "a body blow to the American economy", declared Stuart Eisenstat, chief domestic-policy adviser of Mr Carter. His chief inflation fighter, Alfred Kahn, called it a "disaster". The latest OPEC increase "raised the spectre that we will be bumping double-digit inflation for the rest of the year", Mr Kahn told a house subcommittee.

Of late symptoms of a softening economy have been piling up thick and fast. The GNP growth, after its big leap in the last quarter of 1978, rose only 0.8 per cent in the January-March quarter. Though weather, strikes, and rising food and fuel costs clearly played a part, there is little doubt that even otherwise the output would have declined significantly. The second-quarter growth figure is not yet available, but it is certain to be low and may even slip into the negative territory.

downward trend

The leading economic indicators, despite their month-to-month fluctuations, are trending downwards, clearly pointing to a levelling-off of economic activities. The index of industrial output plunged 1.5 per cent in April, recovered most of it in May when it rose 1.2 per cent, but fell once again by 0.3 per cent in June, to 151.4 (base year 1967=100).

The automobile industry which is a major pillar of the economy—it accounts for one out of every six jobs while new car sales alone amount to $80 billion a year at retail level—has been in trouble since the beginning of the year. As prices of gasoline began to rise along with spot shortages, buyers turned away from high-priced gas-guzzlers and snapped up fuel-efficient small cars, especially imported ones, but more recently they have been increasingly giving up on both because of their eroding purchasing power, uncertainty about gasoline supply, and insecurity about the future.

In the last two years the auto industry sold over 11 million cars a year. But in May the sales rate was at 8.5 million units a year, and early in June it dipped further—to 7.3 million cars, the lowest level seen since the 1973-75 recession. The dealers are overstocked with unsold autos; the inventory, consisting mostly of unpopular large cars, now stands at a record level of 2.1 million; and the inventory-sales ratio exceeds the ratio posted in November 1973 at the peak of the last business cycle.

Retail sales have dropped for three consecutive months—by 0.9 per cent in April, 0.1 per cent in May, and 1.1 per cent in June. This last drop is the largest since March 1975 and the three-month slide is the longest since the last quarter of 1974. Retail sales have been adversely affected, above all, by the steep drop in auto sales.

The booming housing industry which has been a powerful propelling force behind the present business expansion has already cooled off. The housing starts, after reaching a peak of over two million at an annual rate in 1978, plunged to 1.5 million in winter and has since bounced back to 1.8 million. They are running 15 per cent below last year's level, and a further dip cannot be ruled out.

The growth in personal income, as indicated earlier, has been lagging behind the rate of inflation. Specifically, for the first five months of the current year it rose at a 8.6 per cent rate against an inflation rate of 13.2 per cent. Orders for durable goods, perhaps the best indicator of future business activity, suffered the sharpest drop in 11 years in April; and since then it has regained only a fraction of the lost ground.

ebbing confidence

Consumer confidence, another key barometer of future business trends, has ebbed off. According to the Conference Board, a prestigeous organization of businessmen, it showed the steepest single-month drop in June since the survey was started ten years ago.

Exports surged for a while aided by the depreciated dollar, but their revived strength is unlikely to last long since the world economy, by all tokens, is about to slow down, spearheaded by Japan and West Germany.

The low level of business inventories because of careful computerized control exercised by businessmen, has been a bright spot during this expansion period. But even here signs of deterioration have begun to show up. Stocks, mainly at retail level, increased a seasonally-adjusted 1.4 per cent in April owing partly to a trucking strike, but they rose again in May another 1.2 per cent.

As for business spending which serves as a major spur to business cycles, after remaining persistently sluggish for quite some time, it started on a belated upswing and still shows some strength. Based on its latest survey in April and May, the Commerce department projected a 4.5 per cent growth in this year's business spending, after adjustment for inflation. The spending level still looks good, but it is hardly good enough to prop up a shaky economy. Besides, the spending probably reflects, at least in part, the anticipatory buying of equipment in an inflationary environment. And, in any case, it is unlikely to hold up in a sagging economy with a slackening demand for consumer goods.

In its economic projections made in January last, the Carter administration forecast, albeit, a slowdown of the economy, but also a modest real growth of around three per cent, with unemployment rising slightly to 6.2 per cent by year-end and consumers' prices climbing 7.4 per cent in 1979. It repeated on several occasions that it saw no recession in the cards, although the projected growth rate was somewhat scaled down in several stages.

However, in its mid-year review of the economy which has just been published, the administration concedes that a recessions is now unfolding, but predicts that it would be mild and brief, with joblessness rising to 6.5 per cent and consumer prices going up 10.6 per cent this year. It has called the outlook "sombre". Others, however, believe that even these official figures are too optimistic. For example, the Congressional Budget Committee has almost simultaneously forecast a one per cent drop in economic growth this year with the jobless rate rising to 6.9 per cent and consumers' prices climbing nearly 10 per cent. Many private economists tend to take an even gloomier view, some even conjure up the vision of another deep, if not the deepest, post-war recession.

Thus practically all the indicators point to the same conclusion; that the economy is headed towards a hard landing in rough weather. It is time to fasten the seat-belts; and there are nervous signs that people are already doing so. How long the economy will remain grounded nobody can foretell at this stage. Given the formidable array of imponderables—inflation, energy, dollar, a possible auto strike in autumn, Washington's fiscal impulses, and Fed's inscrutable watchfulness—crystal-gazing at this moment can only be a futile exercise.

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Cardamom needs a shot in the arm

A.R. Patel & V.K. Madaliya

Cardamom is a big foreign exchange earner. Though there was record production in 1977-78, productivity has sharply declined. The authors have pinpointed some of the important reasons for this decline and suggested measures which could enable cardamom crop to achieve its full potential.

CARDAMOM INDUSTRY in our country witnessed an unprecedented growth registering an all-time record in production, exports and unit value earnings in 1977-78. Export of cardamom during 1977-78 reached an all time peak of 2700 tonnes worth Rs 470 million. The year also witnessed the highest production of 3800 tonnes. The unit export price realised during 1978 touched a new peak of Rs 175 per kg. The comparative idea can be had from the data on production, exports and prices of cardamom from 1964-65 to 1977-78 (see table). However, this industry, of which 94 per cent growers are small cultivators, suffers from many handicaps. While the problem regarding low productivity may have to be tackled by drawing a long-term plan involving researches on breeding, agronomy and disease aspects, the other problems of processing, storage, marketing and credit for production and marketing should be solved immediately. In 1977-78 the value of exports more than trebled the figure of exports during 1976-77 and more than doubled the previous record annual export earning of 1975-76.

considerable export

Total production of Cardamom during 1977-78 is estimated at 3800 tonnes while internal consumption is 1200 tonnes only. The balance of 2600 tonnes is available for export. Total production in 1976-77 was 2400 tonnes compared with the higher production of 3000 tonnes in 1975-76. The main importing countries are Kuwait, Saudi Arabia, the USSR, Japan, GDR and Bahrain. Kuwait topped the list of importers in 1976-77 with imports worth Rs 55.4 million followed by Saudi Arabia (Rs 22.3 million), the USSR (Rs 20.3 million) and Japan (Rs 10.6 million). A breakthrough has been achieved in export of cardamom oil also. During 1977-78 exports of 477 kgs of cardamom oil worth Rs 1.05 million were made. The export price of cardamom oil ranged from Rs 2000 to Rs 2800 per kg. The USA, France, GDR and Switzerland are the main importers of cardamom oil. The yield of oil from cardamom seeds is around five per cent — 20 kg of cardamom seeds when converted into oil will yield one kg of cardamom oil.

queen of spices

Cardamom is considered to be the queen of spices. For a long time now India has been the largest cardamom producer in the world, with annual production ranging between 2600 and 3800 tonnes. Her nearest rival, Gautemala, produces 600-1000 tonnes. Tanzania with 400 tonnes and Sri Lanka with a 300 tonnes annual average production rank third and fourth. The centuries old Indian cardamom industry is export oriented contributing to the national exchequer more than Rs 400 million in foreign exchange. The cultivation of cardamom, botanically, known as *Elettaria Cardamomum*, has traditionally been confined to the high ranges of the western ghats in south India. Kerala, Karnataka and Tamil Nadu are the producing states in that order.

Cardamom finds its utility in innumerable products. It is used in liquor, drugs and even tooth paste. In Iraq the kind of white washing soap called 'Abu Hail' contains cardamom for fragrance. For long it has been believed to be the most powerful/effective aphrodisiac. Its medicinal properties are recognised in bronchial ailments and as a cardiac stimulant, chewed after meals, it is supposed to have digestive properties. The Japanese use it in making curry powder, hams and sausages. In Holland, Sweden and Scandinavia it is used to flavour baked food. The major use to which cardamom is put in west Asian countries is for the preparation of cardamom coffee known as 'ghawa' in Saudi Arabia. It is now becoming increasingly popular and for a rich Saudi it has become a status symbol. In west Asian countries no religious or social function is complete without 'ghawa' drinks.

falling productivity

Productivity in Indian cardamom industry is nowhere near its potential. About 30 to 40 years ago yield of 100-150 kgs per acre was a common occurrence. Today the average yield is 17 kgs. The reasons of such a drastic fall in the level of productivity are not far to seek. Lack of information on scientific and improved methods of cultivation, processing/storage research are the main problems of the cardamom planting community, especially the small growers. Unaware of the important techniques, the growers are following the time old methods of cultivation which is the main reason for low productivity. Low productivity increases the unit cost and this in turn reduces the competitive nature of Indian cardamom in foreign markets. The plantation has so far not been adequately manured and given fertilisers.

The depletion of soil fertility has adversely affected the yield. Also, disease-free planting material is not available. Disease has often taken heavy toll. The growing tendencies to fell the trees and opening of cardamom belt for cultivation of other crops have done incalculable harm to the plantation. The establishment of colonies—Kollar Pattam in 1955, Vadammedu and Chakkuvallam in 1967—wiped out thousands of acres under cardamom cultivation. Indiscriminate deforestation has also resulted in ecological imbalances which have ruined even existing plantations. Due to ecological upset caused by large-scale deforestation, the plantation has to face long spells of drought which seriously affect the vegetative growth as well as the flowering phase. The growth of the plant in the slopy areas mainly depends on how best these plants are protected from breeze, as the desiccating effect of wind rapidly decreases the soil moisture and the micro-climate in the plantation is badly affected intensifying the ill-effects by drought.

Virus, bactarial and fungal diseases such as Katte or mosaic disease, Azhukal a rot disease, clumb rot or rhizom rot have become common occurrences. The cardamom thrip, hairy caterpillars, white flies and borers of various trees are among the common pests.

The Marketing Research Corporation of India in their 'Survey of India's export potential of spices' have stated that "The US and the USSR are two countries where India has a wider scope for her cardamom in the coming years". Whereas in the USSR, India is as yet the sole supplier, in the US Gautemala cardamom has had an edge over ours, not only because of her geographic nearness which imparts to it the advantageous position as far as freight terms are concerned but also due to her lower prices. Gautemala cardamom is now being considered more competitive even in some of the west Asian countries. Whereas the Indian aroma still finds preference, the external appearances (fresh and greener) of Gautemala cardamom is finding favour. Besides, there are complaints of delayed deliveries, and supplies not conforming to approved samples against Indian cardamom.

Although no accurate statistics are available about the area under cultivation, production levels, production counts and degree of efficiency in cultivation in other countries, yet it is reported that productivity in Gautemala and Tanzania is much higher than in India. An Indian delegation which visited Gautemala in September 1977 reported comparatively pest and disease free crops. However, there is no common agency in these countries comparable to India's Cardamom Board responsible for development, extension, research etc. Also, according to FAO information, diseases due to natural disasters had almost destroyed 50 per cent of Gautemala's cardamom crop in 1975-76 which would take some years to recover. Beside, production potential for cardamom in India is high. Thus, efforts should be made to take advantage of the situation and the prospects.

Production, Exports and Prices of Cardamom from 1964-65 to 1977-78

Year	Production	Exports		
		Quantity (tonnes)	Value (Rs in crores)	Unit value Rs/kg.
1964-65	2200	1503	2.72	18.08
1965 66	2000	1134	4.23	37.28
1966 67	2700	1590	7.96	50.04
1967-68	2400	1451	7.03	48.42
1968-69	2100	1291	6.74	52.18
1969-70	2300	1149	8.93	77.70
1970-71	3170	1705	11.22	65.78
1971-72	3785	2147	8.03	37.41
1972-73	2670	1384	6.85	49.45
1973-74	2780	1813	11.55	63.71
1974-75	2900	1626	13.32	81.92
1975-76	3000	1941	19.38	99.88
1976-77	2400	893	14.03	157.17
1977-78	3800	2683	46.99	175.16

According to a recent survey undertaken by the Cardamom Board, the current world supplies of cardamom can satisfy only 75 per cent of the world demand and the demand trend from major markets is favourable. The increased demand for high quality cardamom is from west Asian markets but there are also opportunities for Indian exporters to regain business in European markets. The principal world markets for cardamom can be divided into two categories.

quality markets

The first category is the prime markets for high quality green cardamom and are exclusively situated in the Persian Gulf area where consumption of Gahwa cardamom coffee is a deeply entrenched social custom. These markets in all consumed about 3000 to 3700 tonnes of cardamom in recent years. The second category of markets are chiefly Nordic countries where cardamom is consumed in bakery products and is used in the processed food industry. The total volume of imports by these countries varies from 600 to 650 tonnes a year. The other important markets are the USSR (200 tonnes), Pakistan (400 tonnes), Japan (100 tonnes) etc. In short, the present world requirement of cardamom is around 5000 tonnes whereas the total supply does not exceed 3700 tonnes, keeping away quantities required by domestic consumption by the producing countries, mainly India. Thus, cardamom has been and will continue, in the short term at least, to have a sellers' market.

If cardamom is to achieve its full potential yield and production, a number of measures may have to be taken. The research programme should be intensified to tackle specific problems which have been responsible for low productivity. The extension programme should also simultaneously be reoriented to identify the problems of small growers. The demonstration of scientific methods of cultivation—adoption of high-yielding varieties, preparation of land, planting techniques, after-care, harvesting and post-harvest processing—may have to be undertaken on a larger scale. More emphasis needs to be given to solving the growers' problems such as problems of cultivation, planting material, agronomy, diseases, pests etc; problems of processing and problem of marketing. Planting of suitable trees to act as wind breakers is advocated.

Experience reveals that most of the cardamom growers being on government lease-hold for 10-20 years are plagued by the insecurity of ownership. This situation needs to be corrected by taking administrative measures.

large cardamom

Sikkim has the largest area and maximum production of large cardamom (*Amomum Subulatum Rexburgh*) in the country followed by sub-Himalayan regions of West Bengal and Assam.

Since large cardamom is propagated vegetatively, quality of planting material plays an important role in determining the productivity and duration of plantations. In the absence of any organised agency to supply suitable and healthy planting material, farmers plant whatever they get easily. Thus, the start of plantation itself is done in a very poor way. The plantation is therefore destroyed in a very short period. Large cardamom plantation which bears fruits for many years should be planted with proper spacing and given fertilisers, soil-moisture and interculture. In the entire duration of the plantation no fertiliser or manure is added.

Similarly, overcrowding of the plants, presence of competitive weeds and absence of sufficient soil-moisture at the critical stages of plant growth and development deteriorate the productivity of these plantations. Furkey virus disease is a singular cause for the deterioration of most of the cardamom plantations. Chirkey, another virus disease affects the productivity of plants by destroying the photosynthesis efficiency of the affected leaves. Flowers and fruits of cardamom are damaged extensively by rats and other wild animals which feed on the unripe fruits. Improper time of harvesting, defective processing and unscientific storage facilities affect the quality of the final product. Transport and marketing difficulties also affect prices.

With a view to improving the socio-economic conditions of the cardamom growers in Sikkim as also those of Kerala, Tamil Nadu and Karnataka efforts will have to be made to develop/formulate a long-term plan involving an integrated research-cum-development project. The research programme should aim at solving the problems of cultivation involving quality of planting material, requirements of space, nutrients, soil-moisture and inter-cultivation practices. Planting material of good quality is not available to the growers. Need for an organised agency to produce and supply required quality planting material can hardly be emphasized. The recommendations of the National Seminar on Cardamom (1977) regarding setting up cardamom genetic gardens for breeding superior disease-free cardamom and research on integrated pest management etc. should be implemented on a priority basis as these are the main factors inhibiting/limiting production.

improved techniques

Processing techniques need to be improved, perfected, standardised and widely popularised. Since the harvesting of fruits from the plantation is done at one time and at the convenience of the farmer, the harvested produce contains fruits of different degrees of maturity which causes variations in the appearance and quality of processed fruits. The methods of processing which is very crude and unstandardised results in poor skin colour and quality of dried fruits. Good skin colour of fruits attracts higher price. Uncontrolled heat in the locally made kiln destroys many valuable chemical constituents of cardamom seeds. The harvested fruits should be first washed with water and spread out thinly in the curing chamber and stirred frequently to ensure uniform drying. Drying is completed within 48 hours in the curing chamber. By drying in the curing chambers, the green colour of the capsule is retained which is an attraction in the foreign markets. Facilities for storing the dried fruits are inadequate and unsatisfactory causing loss of good skin colour during the period of storage.

There have been serious problems in marketing of cardamom. A sample survey conducted by the NCAER (1976) revealed that the cardamom grower in Sikkim received about 50-60 per cent of the price paid by the consumer, while the intermediaries appropriated the big chunk. Similarly, the small growers in the south also suffer from the disadvantage of unorganised marketing system. The problem may have to be approached through involving the growers and forming their cooperative societies. The management of the societies should be supported by required professional management and infrastructure. The market survey should be a continuing feature and new markets must be captured for which the consumers' need should be studied.

production credit

Although the low level of yield could be attributed to a number of reasons, it is felt that the poor state of plantation is the non-availability of production-credit. Traders generally disburse loans in cash and kind to meet various types of requirements of the growers including consumption needs and other expenses. These loans advanced at usurious rates of interest are recovered in terms of cardamom. The growers are tied to their loans and they have no alternative except to tender their cardamom output to their lenders. In the absence of any institutional agency especially in Sikkim to provide credit without any security (and no loans whatsoever for consumption purposes) the growers have no other option except to approach the moneylenders/ traders who are always obliging. As a result the grower has to receive whatever unremunerative price is offered for the product.

The financing institutions would have to be involved in financing the development projects such as promoting greater use of fertilisers and pesticides; setting up preservation and processing units; purchase of electric driers for cardamom curing; construction of curing barns; intensive cultivation of cardamom; encouraging bee-keeping in cardamom gardens, purchase of plant protection equipments; undertaking soil conservation measures in the cardamom plantation area; development of ground and surface water resources in the plantation area; establishment of seed farms; etc.

TRADE WINDS

Curbs on Sugar Holding

THE GOVERNMENT has reimposed restrictions on the holding of sugar stocks by recognised dealers. The stock limit for a dealer in cities and towns with a population of 500,000 and more will be 1,500 quintals. The limit for a dealer in cities and towns with a population of 100,000 and more, but less than 500,000 will be 750 quintals and in towns with a population of less than lakh the limit will be 375 quintals. The limits will be higher in Calcutta and extended areas. There the limits are 7,500 quintals for recognised dealers who import sugar from outside West Bengal and 1,500 quintal for other recognised dealers.

The order will not apply to the holding of stocks on government account or by recognised dealers nominated by the state government, or an officer authorised by it to hold such stocks for distribution through fair price shops, or by the Food Corporation of India. The government has also directed that no dealer will keep in stock more than 2,500 quintals of khandsari open pan sugar at any time.

Duty on Laminated Aluminium

The government has reduced the import duty on laminated and plain aluminium foil for strip packing of drugs and medicines. This will reduce the cumulative incidence of duty from 194 per cent ad valorem on c.i.f. to 232.5 per cent. The government has reduced the basic customs duty to the level of 27.5 per cent and abolished the additional duty of 32 per cent ad valorem leviable on plain aluminium foils subject to certain conditions. This is meant to ensure that the final prices of drugs and medicines to the consumer do not go up. The concession on both varieties of aluminium are available up to September 30, 1979.

Changes in Excise Payment

The central government has decided that, effective from August 1, manufacturers of goods falling under excise item 68 should follow the normal excise procedures applicable to other assessees working under production-based control. However, some major procedural relaxations given earlier to the manufacturers of goods falling under this item, have been retained in the case of those involved in turn-key projects, those supplying goods in knocked-down conditions and those manufacturing a wide variety of goods falling under item 68.

Some of the important procedural realisations given under the new rule 173-pp relate to acceptance of private accounts in lieu of statutory records; grouping of goods for account purposes; submission of provisional monthly returns; waiver of submission of price-list where assessment, is based on invoice value; and procedure for payment of duty where the same is not correctly determinable at the time of removal of the goods from the factory.

In 1975, goods "covering all other goods not elsewhere specified" were subject to one per cent ad valorem duty. Since then this had been increased and stood at eight per cent in 1979. Since the present rate of duty is higher than that applicable to several commodities which were being governed by the normal procedure, there was no more any justification for any special procedure for these. Moreover, the present rate of duty will in itself justify that the control over goods falling under it is fully accounted for, which a relaxed system of control may not be able to achieve.

Team to Assess FCI Operations

A team of the board of directors of Food Corporation of India (FCI) is touring various states for a first hand assessment of the operations of the corporation.

The team, consisting of Mr Ranjit Singh Nazar, Mr Ram Charan and Mr Raja Ram Choudhry will also assess the reactions of farmers and consumers. It witnessed foodgrain and fertiliser handling operations at the Madras port recently. The team also visited FCI, godowns. While appreciating the work done by FCI, Mr Nazar stressed the need for adopting standardised norms for ensuring the weight of fertiliser bags to avoid complaints from farmers. The team noted the growing demand in Tamil Nadu for indigenous wheat, following the change in food habits of the people.

Dividend Repatriation

The Finance ministry sources have clarified that non-resident Indians are already allowed, under certain conditions, to repatriate dividend to their country of residence, and no special favour has been shown in this respect to Mysore Paper Mills as stated by the Karnataka Finance minister in Dubai recently.

But these sources say that an exception has been made with regard to the level of investment participation by non-residents in the company's expansion programme.

Ordinarily, dividend repatriation is allowed only in cases where non-resident Indians contribute not more than 20 per cent of the cost of projects open to investment participation. In the case of Mysore Paper Mills, this contribution has been raised to the level of 40 per cent of the cost of expansion. Under the existing rules, investments in which non-resident Indians can participate are divided into areas where dividend can be repatriated and where they cannot. In non-repatriable investment areas covering priority sectors, the level of contribution by non-residents can be as much as 74 per cent.

The Reserve Bank of India requires the non-resident investors to operate separate rupee and foreign currency accounts in Indian banks. The investors are, thereby, enabled to deposit dividend receipts in foreign exchange in their foreign currency accounts.

The bank also permits them to freely withdraw amounts from these accounts either for repatriation to their country of residence or for further investment in Indian industries. In a way, therefore, dividend repatriation in foreign currency by non-resident Indians is indirect and also subject to check by Reserve Bank of India.

Panel to Examine IA Aircraft

The government has appointed a four-member committee to examine the maintenance standards and airworthiness of Indian Airlines aircraft. The committee will also look into the work of the Directorate General of Civil Aviation in monitoring the engineering standards of the Indian Airlines. Mr K.G. Appuswamy, former managing director of Air-India is the Chairman of the commitee, Mr H.S. Khosla, Controller of Air Safety, department of Civil Aviation is the member-secretary and the two other members are Mr T.V. Sankaran and Mr P.D. Baliwala. The committee will submit its report in about six weeks.

Training for Vietnamese Engineers

Training of Vietnamese railway engineers and technicians on the Indian Railways was discussed recently when a high-level three-member delegation from Vietnam led by Prof Le Khac, Vice-chairman of the State Commission for Science and Technology met the chairman Mr M. Menezes, and other members of the Railway Board. To start with five persons will be trained in the current year and another five in 1980 in the field of coach-building, diesel locomotive production and sophisticated signalling and telecommunication systems.

The Vietnamese also indicated that they will be approaching the Indian Railways for the services of Indian experts to be deputed to Vietnam for assisting the Vietnamese Railways in their rehabilitation and modernisation programmes.

Mr Menezes mentioned during the meeting that the Integral Coach Factory at Perambur, Madras, had an order for 50 metre-gauge coaches for Vietnam. These have been planned for manufacture during the current financial year.

UNDP Grant for UGC Project

The United Nations Development Programme (UNDP) will give assistance worth about 2.5 million dollars over the next three years for the University Grants Commission's (UGC) project of special assistance to selected university departments for their research and development (R and D) potential. UNDP had earlier given assistance of about one million dollars to these departments. The project promotes scientific R and D activities of nine university departments in physics, chemistry, biochemistry geology and zoology. It also provides for the procurement of sophisticated scientific equipment, training fellowships, as well as services of consultants. The universities selected are Andhra, Baroda, Calcutta, Jadavpur and Lucknow besides the Indian Institute of Science, Bangalore.

ECIL Exports to the USSR

Electronics Corporation of India Limited (ECIL), Hyderabad, has bagged its first major export order worth Rs 4.3 crores from the Soviet Union. A company spokesman revealed that the Soviet Union had placed orders for ferritecore memory valued at Rs 3.65 crores and troposetter antenna worth Rs 63 lakhs. ECIL has already been manufacturing both these items. Several countries from East Europe and West Asia have approached ECIL for export and collaboration.

Mineral Exploration Corporation

The Mineral Exploration Corporation (MEC) earned a net profit of Rs 1.52 crores, according to its estimates for the year 1978-79. This is an improvement on the Rs 1.02-crore profit in 1977-78 which enabled it to wipe out the accumulated losses of the previous years.

The higher profit in 1978-79 is due to a substantial increase in output and higher productivity. Drilling and mining targets for the year were exceeded and the corporation undertook 187,167 metres of drilling against a target of 157,600 metres. Productivity went up as a result of new techniques and drilling activity went up from 99 metres per month to 130 metres per month.

MEC's activities during the year were spread over 60 projects. Of these 54 relate to mineral investigation, four to mine construction and two to geo-technical studies. A beginning was made in the field of engineering geology by undertaking drilling foundation studies on the Dihang and Subansiri projects of the Brahmaputra Flood Control Commission.

A major breakthrough by MEC during the year was the establishment of reserves of about 13,466 million tonnes of bauxite, 1385 million tonnes of coal and 7.92 million tonnes of iron ore. It has thus helped supplement the work of the Geological Survey of India substantially.

Sulphur from Bahrain

The Minerals and Metals Trading Corporation (MMTC) has contracted to import about 80,000 tonnes of sulphur from Bahrain in jumbo bags weighing 1.5 tonnes each. This is being done in view of the difficulties in getting sulpher from the Poland and to some extent from Canada. Normally, MMTC imports around one million tonnes of sulphur each year to meet the requirements of the fertiliser factories as also for use in manufacturing sulphuric acid, paper, rayon and sugar.

According to a MMTC release, because of the pollution regulations at Bahrain the local government has been averse to the transport of sulphur in bulk. The only way to tide over this problem was

HEAVY ENGINEERING CORPORATION LIMITED

(A Government of India Enterprise)

Central Purchase Deptt.
Hqrs. Admn. Bldg. (5th Floor),
P.O. Dhurwa, Ranchi-4.

Tender Notice No. PUR/CPR/78/480002/BM

Sealed Tenders are invited for supply of G.I. Pipes as per schedule approximate value of which will be Rs. 1.10 lakhs.

Tender documents along with details can be bought within 20.8.79 on non-refundable payment of Rs. 10/- (Rupees Ten only) by Crossed Postal Order drawn in favour of H.E.C. Ltd., and payable at Dhurwa Post Office on any working day between 10.30 AM to 4 PM from this office or from the Branch Office at 77, Park Street; Calcutta-16. Payment in any other form will not be acceptable.

Tender will be received upto 3 PM on 27.8.79 and will be opened on the same day at 3.30 PM before attending tenders.

The Corporation reserves the right to accept or ignore any or all tenders without assigning any reason whatsoever.

davp 763(72)/79

to bag the sulphur. The bagged sulphur on arrival at Indian port is to be handled by the ship's gear and unloaded directly into trucks and/or on the jetty through the bottom opening in the bag which can be released by simply pulling a string.

Wagons for Railways

The Railway Board has cleared a proposal for the procurement of 13,100 wagons in terms of four-wheelers for this financial year. This is expected to augment the availability of wagons for transport of essential items to different parts of the country.

At the end of May this year the railways had a fleet of 413,202 broad-gauge and 111,247 metre-gauge wagons in terms of four-wheelers. The availability of wagons, however, suffered throughout last year and in the first quarter of this year since the turn-round of wagons was poor. This in turn was a sequel to the agitation by the railway staff, increase in lead traffic, calamities like floods in many parts of the country and public agitations.

The railways have time and again been blamed for nonavailability of wagons by the coal authorities. But the collieries have played no mean part in creating conditions of confusion in the matter of wagon availability.

A larger number of wagons are often indented for loading coal than is necessary. Thus, without any prior notice to the railways, the wagons are detained for a number of days nor is any valid reasons given by them when confronted with the situation.

For example, the daily average number of wagons detained for completion of loading from January to May this year has gone up steeply. In January, 1976, 1,643 wagons were detained for loading against 1,243 wagons in January 1978. This has been going on from month to month with no effort on the part of the collieries to improve the situation. In April and May this year, 1,722 and 1,883 wagons were detained by them.

New Facility by Bank of Baroda

Bank of Baroda has introduced an exclusive service to their clients with a view to providing an aid to bank's customers while on business tour, holiday, pilgrimage, etc. with effect from July 16.

This new special service is called as travel-card facility wherein, the customer has to earmark the amount in his account in order to get a travel-card. After getting it, on presentation of the card and cheque to any branch of the bank in India, the customer can withdraw the necessary amount. The card would be valid for six months subject to a maximum drawing limit of Rs 5,000. The customer can get a new travel card after the expiry of the existing card.

The bank has extended this facility, at present to the metropolitan and certain urban branches, but the encashment of the cheques can be made in all the branches of the bank in India. The bank has a network of over 1,300 branches.

Nirodh Distribution

Addressing the Nirodh Advisory Committee here recently the minister for Health and Family Welfare, Mr Rabi Ray, expressed satisfaction that during 1978-79 about 117 million pieces of Nirodh were sold under the Nirodh Commercial Distribution Scheme. He said, as government had decided not to use coercion for all time to come, people had to be given the choice of using the contraceptives they like. Since Nirodh was popular with people, it was "our bounden duty to push Nirodh sales throughout the country". He called upon the private sector and public sector companies, involved in Nirodh sales, to make greater efforts to push up the sales in the rural areas.

The minister added that the government on its part was directing the community health workers—about a lakh of them were already in position—to undertake the sales of Nirodh in the villages. The minister suggested that automatic machines for vending Nirodh should be obtained and installed at railway stations and important bus stops and other places which are accessible to the people.

About 234 million pieces of Nirodh were distributed in India during 1978-79 through the channels of free distribution and commercial sales. The retail outlets for Nirodh increased from 45,000 in 1970 to over 300,000. In 1976-77, about 98 million pieces of Nirodh were sold, in 1977-78

Industrial Finance Corporation of India
Bank of Baroda Building
16 Sansad Marg
New Delhi-1

NOTIFICATION NO. 4/79. DATED THE 18TH JULY, 1979

NOTICE

Notice is hereby given that the THIRTYFIRST ANNUAL GENERAL MEETING of the shareholders of the INDUSTRIAL FINANCE CORPORATION OF INDIA will be held on Monday, the 24th September, 1979 at 4.00 P.M. (Standard Time) at Hotel Imperial, Janpath, New Delhi, to transact the following business:

(1) To read and consider the Balance Sheet of the Corporation and the Profit and Loss Account for the year ending the 30th June, 1979, together with the Report by the Board on the working of the Corporation for the year and the Auditors' Report on the said Balance Sheet and Accounts.

(2) To elect one director each in place of (i) Shri D.C. Gupta and (ii) Shri Shamrao Kadam, being Directors elected to represent shareholders referred to in clauses (c), and (e) of sub-section (1) of Section 10 of the Industrial Finance Corporation Act, 1948 respectively, who retire, but are eligible for re-election under Section 11 of the IFC Act.

(3) To elect a Director in place of Shri B.C. Randeria, being Director elected to represent shareholders referred to in clause (d) of sub-section (1) of Section 10 of the Industrial Finance Corporation Act, 1948, who retires, but is eligible for re-election for another term of 4 years under third proviso to sub-section (2) of Section 11 of the IFC Act.

(4) To elect under Section 34 of the Industrial Finance Act, 1948, one Auditor duly qualified to act as Auditor of Companies under sub-section (1) of section 226 of the Companies Act, 1956 (1 of 1959) by the parties mentioned in sub-section (3) of Section 4 of the Industrial Finance Corporation Act namely scheduled banks, insurance companies, investment trusts and other like financial institutions, and co-operative banks, in place of Messrs Ray & Ray Chartered Accountants, Calcutta, who retire, but are eligible for re- election,

Sd/-
Baldev Pasricha
CHAIRMAN

davp 806(5)79

about 110 million pieces and in 1978-79 about 117 million pieces.

New Telephone Technique

A telephone service which is exclusively based on light, is the vision of the telephone system of tomorrow. In the Siemens development laboratories, a system has been developed, which allows the conversation from the mouth-piece of the calling subscriber to the ear-piece of the called subscriber to be transmitted on optical fibre of special quartz glass. Laser light, which is fed from the telephone exchange, is modulated through the vibrations of the membrane of the mouth piece of the telephone set. At the end of the cable, the ear-piece converts the light waves, without additional amplification, to speech. A new electronic element has been developed which responds to light waves and starts ringing. Thus a telephone set in this system works without electric current—which is provided at present from the telephone exchange over telephone wires.

Pakistan's Railway Plan

The Pakistan National Economic Council has approved its railways' annual development plan for the next financial year costing 100 crores rupees including 40 crores rupees in foreign exchange. The outlay includes 39.7 crores rupees for rehabilitation of track and setting up of four concrete sleeper factories. Rupees 40.7 crores have been provided for purchase of 30 diesel electric locomotives from Canada for which orders have already been placed and four special type shunting engines from Japan and for building 150 coaches at Islamabad Carriage Factory. The chairman of Railway Board told in Rawalpindi recently that the railways had at present 50 per cent capacity for manufacturing various components for locomotives and it proposes to raise it to 80 per cent during the next five years.

IWC Revises Wheat Estimates

The International Wheat Council (ICW) has put 1979 world wheat production at between 410 and 415 million tonnes.

The IWC said that the upward revision stemmed mainly from new US Department of Agriculture estimates for this year's wheat production. Another reason for the improvement in estimates is being attributed to the Indian crop which is now put at 34.7 million tonnes compared with 31.3 million tonnes the year before.

MAMC Executes Soviet Order

Mining and Allied Machinery Corporation Ltd(MAMC), Durgapur, a public sector undertaking, shipped recently 255 tonnes of equipment for eight belt conveyors valued at Rs 35 lakh to Turkey on board S.S. Valentin Khutorskoy against an order placed by V/o Tiajpromexport, Moscow. These belt conveyors will form a part of the total contract secured by the USSR from Iskenderum Iron and Steel Works, Turkey for their second stage of expansion. The execution of the order was done by MAMC within a time bound schedule.

The belt conveyor items, comprising structurals, mechanicals and electricals were manufactured by utilisation of indigenous materials and components excepting heat resistant belts.

The execution of the order by MAMC for export to a third country opens up a big horizon and also a brighter prospect for securing further export orders from the USSR for the third countries.

Prior to shipment to Turkey, MAMC made a part shipment against another order to West Germany which should also be completed by them shortly.

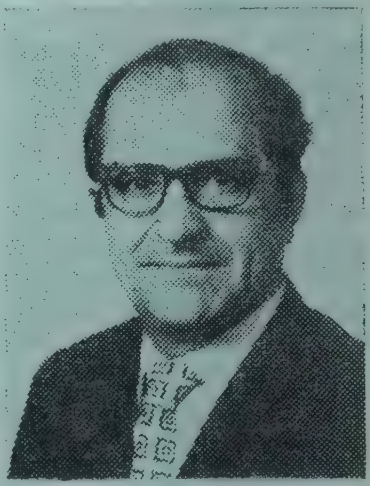
Incidentally, MAMC has another export order in hand for supply of mining equipment valued at $596,549 (Rs 59 lakh) to the government of Afghanistan. The shipment is also likely to commence shortly. A high powered Soviet delegation headed by Mr Boris Chofranov, Vice President of Prommashexport, is currently visiting MAMC, Durgapur for exploring further prospects of export of various types of equipment to the USSR.

Arbitration Agreement with Thailand

The Indian Council of Arbitration has entered into an arbitration service agreement with the Board of Trade of Thailand. The agreement has been signed by the presidents of the council and the Thai Board of Trade and it has come into force from April 15, 1979. As a result of the agreement, facilities for amicable settlement of commercial disputes arising between the trading parties in India and Thailand have now been established. According to the arbitration agreement, the arbitration clause has to be included in contracts between Indian parties on the one side and Thai parties on the other side.

Names in the News

The Associated Cement Companies Limited has announced that **Mr N.A. Palkhivala**, who was chairman of the board of directors of the company—prior to taking up his assignment as India's ambassador to the US—has been re-elected chairman by the board at its meeting held on July 27. Outgoing ACC chairman, **Mr P.S. Mistry** desired to lay down the office of chairmanship as Mr Palkhivala has returned to Bombay. Mr Mistry has been re-elected vice-chairman—a position he held prior to Mr Palkhivala's departure for Washington.



Mr N.A. Palkhivala

Mr A. Krishnaswami, former Chief Secretary to the government of Andhra Pradesh, has been appointed chairman of Electronics Corporation of India Ltd.

Mr N.K. Bharadwaj has taken over as Executive Director of the State Trading Corporation.

Mr R. J. Shahaney has been appointed Chairman of Ashok Leyland Ltd, in addition to being Managing Director of the company.

The Tata Iron & Steel Company Limited

Chairman's Statement

The following is the statement of Mr J. R. D. Tata, Chairman of the Tata Iron & Steel Company Limited, for the year 1978–79.

A good year but....

The past year was generally a favourable one for Indian industries: the earlier recession was converted into a virtual demand boom for their products; and the price situation remained stable, thanks largely to the massive investments on irrigation and fertilisers in recent years which yielded record crops during the year.

2. The groundwork thus seemed to have been laid for a major investment boom thereafter, provided Government adhered to practical, result-oriented policies and refrained from the recurring ideological assaults on the private sector which had done so much harm in the past.

....An uncertain future

3. While it may thus be said that, on the whole, the past year was one of cheer, I wish one could be as happy about the performance of the economy during the current year, notwithstanding the optimistic picture painted by the Minister for Industry in a Press interview on the 6th of July. I sincerely hope he proves right, but the portents are anything but encouraging as, on the one side, we see, throughout the land, factories shut down or crippled by lack of coal or power or by industrial disputes and, on the other, the resurgence of inflation of which we had been largely and mercifully free for the previous four years.

4. On the purely economic front, the most serious of the signals of heavy weather ahead is undoubtedly the virtual collapse in some regions, and repeated interruption in others, in the supply of coal and electric power, aggravated by the failure of the Railways to meet essential requirements. The situation in regard to these most important and basic of the infrastructural necessities of industry is so serious as I write this report, and its crippling effect permeates to so many industries, that I propose to devote a good part of this Statement to it.

The man-made crises of power..

5. This is one crisis for which no blame can be attached to the private sector for, with the means of production and distribution of coal and power virtually monopolised by Central or State Governments, the responsibility for providing these basic needs of industry, and for failure to do so, rests squarely with them and with no one else.

6. While it is only fair to recognise that the task is indeed an onerous one, involving as it does widespread operations in a large number of units spread over vast areas, it is difficult, however sympathetic one may be to the authorities concerned, to find any acceptable excuse for their having allowed the present crisis to develop despite the many signals and warnings of impending disaster in these areas which were so clearly evident in recent years.

7. I know from personal experience, having myself headed an important public sector enterprise for twenty-five years, that public sector can be efficient, at least when resonably free from excessive bureaucratic and ministerial interference. I am therefore, as much opposed to the general criticism of inefficiency levelled at public sector as I am to the constant attacks against the private sector from the Government side, but it is impossible to discuss the power crisis which cripples industry from time to time without comparing the performance of the two sectors.

8. While the three fairly large thermal power systems still in the private sector, namely those of the Calcutta Electric Supply Corporation, the Ahmedabad Electricity Company and the Tata group in Maharashtra, have maintained normal operations to world standards under the same difficult conditions, the performance of the great majority of the units in the public sector has been a dismal one.

9. It is generally accepted that every megawatt of installed power rendered avoidably unproductive because of poor maintenance of equipment or management results in a loss of industrial production of about Rs. 1 crore per annum. Operating the 12,550 megawatts of installed thermal generating capacity in the public sector at the latter's low standard of productivity has thus resulted in a loss of 25 to 30 million units per day, equivalent to what should be the normal output of 2,000 megawatts of generating capacity and therefore to a loss to the country of about Rs 2,000 crores per annum.

....And of coal

10. The present situation in regard to coal is just as serious. In some ways it is even worse. Power made available to industry, inadequate as it may be, is at least of reasonably uniform quality, except for fluctuations in voltage and frequency in some areas. In the case of coal, however, not only are industries and essential utility services made to operate on a hand-to-mouth basis or even to close down altogether for hours and days on end with no coal in stock or in sight, often at the risk of serious damage to equipment, but such coal as is supplied to them is of a quality which is probably the worst in the world. Indian coals, by their nature and composition, are unfortunately high-ash coals, i.e. with a high content of incombustible material, much of which however could and should be, but is not, removed in washeries at the collieries, except in regard to coking coal supplied to the steel plants. As if that were not enough, a considerable amount of stone and shale is mined with the coal and shipped to the unfortunate consumer who is forced to accept, along with the excess ash in the coal, a large proportion of unwanted material, and pay for the cost of transporting it. I say 'forced' advisedly, because complaints to the coal authorities are met with a blunt 'take it or leave it' answer.

Passing the back

11. Every industry in the country, including the steel industry, was adversely affected by shortages or irregularities in the supply of its coal and power needs. The situation has further deteriorated during the current year, and in the first quarter alone the loss of production at the plants of the five main steel producers was about 140,000 tonnes, of which 30,000 tonnes pertained to Jamshedpur. If the same situation prevails in the rest of the year, the loss of production will exceed half a million tonnes and ultimately involve an increase of Rs. 150 crores in the country's import bill.

For this state of affairs the coal authorities blame the Railways for lack of wagons and the power authorities for shortage of power; the power authorities blame the coal authorities for lack of coal and the Railways for lack of wagons to transport it; the Railways deny any default on their part and the Ministry of Energy assures us that everything is being done and all will soon be well.

12. In the face of such a situation, one may be permitted some astonishment at finding a leading Government spokesman asserting that there was nothing to be apologetic about and advocating the nationalisation of more industries, including our own Company and Telco.

13. I am sure you will all have been following, possibly with some surprise, the strange course of events which compelled me, in January, for the first time in my long career as your Chairman, to intervene publicly in Party matters by addressing directly the National Excutive of the Janata Party. As my letter and memorandum were widely publicised in the Press, I need not say more about it here except to congratulate and thank the leaders of our Government and of the Party who, recognising the futility of such populist policies, refused to support them. Even more gratifying was the spontaneous interventation of the Tata Worker's Union who strongly protested to Government by letter, telegram and in person against the threat of nationalisation—a heart warming demonstration of their confidence in our management and of the unique relationship that binds together our Company and its employees, perhaps Tata Steel's greatest asset.

14 Faced as we are year after year with threats of nationalisation or other measures aimed at the ultimate elimination of the private sector, I often wonder why is it that we must always look to our northern neighbour for inspiration for our economic policies when it is in the non-communist countries to the West and to the East, such as Germany and Japan, and even in some of our Asian neighbours, that the greatest prosperity and quickest progress has been achived? Not by restrictive, pseudo socialist controls but by allowing reasonable play to market incentives and deterrents, by ensuring in full measure the supply of the infrastructual needs of agriculture and indutry, by encouraging growh and by limiting Government's role to policing, when necessary to prevent abuses, and mainly to monitoring and coordinating economic activities so as to ensure just distribution of growing wealth.

Our own affairs

15. Turning, at last, to our own affairs, the past year has been an eventful one, very satisfactory from the profit point of view, but disquieting in regard to other aspects.

16. As was to be expected, the steel price increase, averaging Rs. 175 per tonne on our product mix, effective from 5th June 1978, was the main contributing factor to our record revenues and profit which would have been still higher had we not lost 60,000 tonnes in output, mainly owing to the coal and power shortages mentioned earlier which began to manifest themselves in the second half of the year. The excellent performance of the plant, which enabled it, despite these and other difficulties, to produce once again virtually one hundred per cent of its capacity and to break a number of departmental records, reflects the high standards and effectiveness of the programme of maintenance and replacements devoted to it year after year. The price we pay to maintain maximum output is high but necessary, and in fact unavoidable, in an old plant such as ours.

17. Had not the unrealistically low ex-factory prices allowed to the steel producers during the last 40 years starved us of funds to plough back into continuous modernisation, the Jamshedpur plant would be, today, not only substantially larger but also more efficient and productive.

The imperative of modernisation

18. The imperative need to keep a plant young through continuous replacements and renovations is unfortunately one of the clear lessons of industrial history of which other countries have taken full advantage but which our Government refused to learn or accept all these years. Their decision to create a Steel Development Fund out of price increases to be used mainly to finance modernisation and development is, therefore, a step in the right direction which may be welcomed, the funds so realised are fairly allocated to the various plants in relation to their needs and in reasonable proportion to the amounts they have contributed to the Fund through the sale of their steel. Assuming that the Development Surcharge remains as it is today, we expect our own contribution to the Fund to be more than Rs. 200 crores over the next five years.

19. This brings me to our Modernisation Programme which is now expected to cost Rs. 150 crores and to be completed in about 36 months from the time the final decision is taken, financial arrangements are made and orders placed. As stated in the Directors' Report the main item of the programme is to replace an old steel Melting Shop commissioned in 1923, by a new shop using a modern oxygen process. With part of its output of steel directly cast into billets, it will make better steel and increase overall output about 180,000 tonnes of steel products thus saving approximately Rs 40 crores a year in imports. In addition, it will enable shutting down a still older Steel Melting Shop dating back to 1912 and a saving of Rs. 7 crores a year in fuel oil. Apart from the new steel making facilities, the programme includes some modifications to our Blast Furnaces and Rolling Mills, a Bar Forging Unit with heat treatment facilities, and a fair amount of initial spares. Despite its heavy total capital expenditure, the Programme is expected to yield a reasonable financial return.

20. Large though this Programme may seem to shareholders, it should be borne in mind that, by the time it is completed, hopefully in about 4 years' time, there will still be parts of the plant at Jamshedpur which will be very old. If the Company is to survive as an efficient producer in the industry which it pioneered 70 years ago, it must, from time to time, undertake projects of modernization, as indeed all steel plants including the Government steel plants must as they age and their equipment and processes become obsolete.

Financing the programmes

21. Our Modernisation Programme estimated, as I have said, to cost Rs 150 crores will be superimposed on our normal 5-year Rolling Programme of continuous replacements and minor improvements, on which we expect to spend, in the 1979-84 period approximately Rs 165 crores, including the balance of about Rs 30 crores on the development of our West Bokaro Colliery. Thus the total amount to be spent on both the Programmes within a period of about five years will exceed Rs 300 crores. This is clearly beyond our capacity to finance all at once out of our own resources which, derived mainly from depreciation; allocations to the investment allowance reserve and undistributed profits, are estimated to be only of the order of Rs 145 crores during the next five years after repaying existing borrowings.

22. As stated in the Directors' Report, we have already arranged to borrow Rs 30 crores from the financial institutions and we are planning to borrow in the form of foreign loans and deferred credits about Rs 50 crores for equipment to be imported for the Modernisation Programme. On present estimates we would

thus be short of total requirements by approximately Rs 80 crores.

23. Considering the much larger amount we will, through our sales, have contributed to the Steel Development Fund, it is reasonable and logical to hope that this shortfall will be met from the Fund and we have approached Government to that end. We have no idea as yet as to the form that withdrawals from the Development Fund will take as the modalities are still under the consideration of Government.

Relief from convertibility

24. In regard to the Rs 30 crore loan, I am happy to report that Government have been good enough to agree that the right of conversion into shares would not be exercised by the financial institutions, provided we do not fail to repay or otherwise service the loan. This was in response to our representation that the loan was required for implementing a project taken up solely at the instance of Government which had directed us to develop our West Bokaro Colliery in order to become self-sufficient in coking coal, and so be able to release upto 0.6 million tonnes per annum for the Government steel plants.

25. We are grateful to Government for this concession similar to the one agreed to in connection with earlier borrowings of Rs 20 crores, and I sincerely hope that it will be a precursor to a more liberal and realistic policy in regard to industrial term finance from Government financial institutions.

26. It is relevant to point out that the inclusion of a convertibility clause in every term loan in excess of Rs 25 lakhs given to private sector companies was made mandatory by Government many years ago when the total holdings of Government directly or through banks and Government financial institutions were much smaller than they are today.

27. If for political or other reasons Government find it difficult to do away with the mandatory nature of the clause, I would urge that they at least agree that the financial institutions should not acquire between them, more than, say, one-third of the equity capital of a company, whether by purchase in the market or by subscription to new issues or by conversion of loans into shares. If such a policy were to be announced, I am sure that the fear installed in the corporate sector by the mandatory convertibility clause would disappear, and with it a serious deterrent to fresh investment in development or modernisation.

Costly wage settlements

28. Following the expiry, on 31st August 1978, of the 4-year Wage Settlement for the Steel Industry, a new settlement has been under negotiation through the Joint Consultative Machinery set up the by Government for the Steel Industry. An agreement has been arrived at with retrospective effect from 1st September 1978 which, translated into a plant level agreement with the Tata Workers' Union on 2nd July 1979, imposes on the Company an unprecedented heavy additional burden of nearly Rs 9 crores per annum for another 4 years, i.e. upto 31st August 1982.

29. The Wage Settlement for the Coal Industry arrived at for a period of 4 years from 1st January 1979 imposes a burden of Rs 3.4 crores in the Wages Bill at our Collieries. We may also expect a wage increase in respect of the mine workers and at Adityapur, whose last settlements expired on 31st March 1979. The combined effect of these wage settlements will thus put up the Company's Total Wage Bill by nearly Rs 15 crores, or Rs 100 p.t. of saleable steel, including the contributions to Provident Fund and Retiring Gratuities.

30. The Steel Minister had indicated that there would be a six-monthly review of costs by the Bureau of Industrial Costs & Prices to consider what compensation should be given to the producers for cost increases beyond their control and that a part of the accretion to the Steel Development Fund would be utilised for compensating cost escalations. We have urged that Government should take note of the substantial cost increases resulting from the wage settlements and other inflationary factors and give suitable relief to the producers.

Social audit

31. Your Company has always been conscious of the fact that its obligations extended beyond the normal corporate responsibilities of a Joint Stock Company to its shareholders and included social obligations to employees, consumers and the national economy. The advent of Independence brought to us an added sense of duty to the nation and society as a whole as well as to the community in the midst of which our activities are located. Shareholders will remember that in 1970, in order to formalise these principles, our Memorandum and Articles of Association were amended to include a clause (Article 3A) which specifically called upon the Company to "be mindful of its social and moral responsibilities to the consumers, employees, shareholders, society and the local community." My colleagues and I now feel that the time has come when our belief that the Company has indeed lived up to its social and moral obligations should be independently confirmed. With that object in view, we have recently decided that, some time before the end of the year, a panel of four eminent and respected persons totally unconnected with the Company or its activities and enjoying public confidence should undertake such a 'social' audit. The members of the 'audit' panel may consist of or include a retired Judge of the Supreme Court of a High Court, a member of Parliament, a trade unionist and a sociologist, whose report will be made public. I hope shareholders will approve of this decision.

Board changes

32. Since the close of the year under review, two important changes have taken place in the composition of the Board, represented by the loss of our Vice-Chairman, Mr. Sumant Moolgaokar, who resigned on 11th July 1979, and by the reappointment as a Director and Deputy Chairman of Mr. N. A. Palkhivala on his return to India on completing his two-year assignment as India's Ambassador to the U.S.A.

33. Both as a member of the Board since 1st April 1966 and before that as a Director of Tata Industries Limited, the Company's Managing Agents, Mr. Moolgaokar made an invaluable contribution to the progress of the Steel Company. The Directors have recorded their deep appreciation of the services and wise counsel of this great industrial administrator to whom goes the main credit for the remarkable success and rapid development of our sister company, Telco.

34. I normally conclude my Statement to you with a well deserved reference to the specially good work and efforts of all our employees at Jamshedpur and elsewhere. Such expression of appreciation and gratitude has never been more justified than in respect of the past year in which the Company could not have achieved in the face of severe input shortages, the outstanding results presented to you, without the hard and devoted work of the entire work force under the leadership of our Managing Director. I am sure that shareholders will welcome the Board's decision to appoint Mr. R. H. Mody Vice-Chairman.

J. R. D. Tata
Chairman

Bombay, 12th July, 1979.

Post Scriptum:

The news of the fall of the Janata Government came after this Statement was released for printing. What the political outcome and the impact on the economy of this event will be is still unknown. All we can hope, somewhat against hope, is that a stable Government will emerge which will give precedence over political issues to the urgent economic problems and needs of the country.

Note : *This does not purport to be a record of the proceedings of the Annual General Meeting.*

COMPANY AFFAIRS

Indian Rayon

As a result of imaginative management of product-mix and diversification, modernisation and expansion, Indian Rayon Corporation Ltd, has achieved a very high rate of productivity—one of the highest in the country—for the year ended June 30, 1979. Its sales, profits and return to the shareholders—dividend and bonus shares—speak volumes for efficient management.

Releasing the results of the company's operations for the year its chairman, Mr Aditya Vikram Birla, pointed out that the finalisation and approval of the accounts by the directors within 23 days from the close of the accounting year, is perhaps a record for a company of this size.

The directors have recommended a 15 per cent dividend (12.5 per cent) plus bonus shares in the ratio of one for every four shares held. The dividend on equity shares will total Rs 52.25 lakhs and Rs 12.56 lakhs on preference shares, making an aggregate of Rs 64.82 lakhs (Rs 56.10 lakhs). The bonus issue will involve capitalisation of Rs 87.50 lakhs.

Mr Birla has told newsmen in Bombay that the company's turnover has increased to Rs 49.92 crores (Rs 40.78 crores), registering an increase of 22 per cent (8 per cent) similarly, the profit before depreciation has increased to Rs 7.67 crores (Rs 5.14 crores), recording an improvement of 15.36 per cent (12.60 per cent). The turnover target for the current year (1979-80) is Rs 60 crores.

The company has an ambitious plan to modernise, expand, diversify and renovate all its divisions at a cost of Rs 8 crores and this amount will be raised from internal resources and loans. Since its application to set up a cement plant in Madhya Pradesh has not found favour with the government because the proposeed site covers "valuable forests" and the government is of the view that the area does not have adequate limestone deposits. It has now submitted a proposal to establish a cement plant of 1,500 tonnes daily capacity at Wadi in Karnataka. This will cost Rs 34 crores and has been planned to be set up in two phases of 750 tonnes per day capacity each.

New Ventures

The company has also applied for setting up an insulator plant at Vapi, in Gujarat. The expansion of its insulator plant to 6,000 tonnes annual capacity is going ahead and is expected to be completed by the end of 1980 to make the unit one of the most modern in the country. It has also made an application to increase the licensed capacity of the rayon plant to 7,300 tonnes a year.

The company is setting up a joint venture project in the Philippines for the production of 3,000 tonnes insulators a year. The Philippine government has granted a licence for it and the government of India's approval for the company's participation in the project is expected to be granted soon. This Rs 7-crore project will have 15 per cent equity participation of Indian Rayon and it will also supply equipment worth Rs 2 crores. The export of raw materials to feed the Philippines plant will bring India more than one crore a rupees year. This will be the most modern plant of its type in the ASEAN region.

On a turnover of Rs 49.92 crores (Rs 40.78 crores) the predepreciation profit is Rs 7.67 crores (Rs 5.14 crores). Depreciation claims Rs 1.19 crores (Rs 1.01 crores), investment allowance reserve Rs 49.13 lakhs (Rs 24.68 lakhs) and the taxation Rs 3 crores (Rs 2 crore) leaving behind a balance of Rs 2.99 crores (Rs 1.47 crores). With the addition of development rebate reserve no longer required Rs 3.82 lakhs (Rs 1.07 lakhs and a Rs 24,000 (Rs 30,000) brought forward from the previous year, the amount available for disposal total Rs 3.03 crores (Rs 1.48 crores). Of this, Rs 2.38 crores (Rs 92 lakh, has been earmarked for general reserve and Rs 64.82 lakhs (Rs 56.10 lakhs) for the dividend.

Century

Century Spinning and Manufacturing Co Ltd has described as "patently fraudlent" a press note and a letter addressed to some leading sharebrokers "signed" by its chairman, Mr B.K. Birla, to damage the reputation of the company and cause panic about it among shareholders. The press note and the "letter" are dated July 18 last. The company has said that the "press note" has given an extremely gloomy picture of the working of the company which has absolutely no relation with reality.

In the letter issued under forged signature of Mr B.K. Birla, it is alleged that "due to some unhealthy developments within the company's board, one of the senior directors is very keen to disinvest immediately his 8,000 shares which were hypothecated with the company against a loan to him," and goes on to invite offers from the sharebrokers for purchase of an initial lot of about 5,000 shares, within seven days. This statement according to the company, is completely fabricated and has no truth whatsover.

Colgate Palmolive

At the annual meeting of Colgate-Palmolive (India) in Bombay, the chairman, Mr O.E. Senior, has stated that the company has experienced severe handicaps in the current year in maintaining a reasonable level of production. However, sales (excluding excise) during the first half of 1979 have increased by 6.8 per cent over the same period last year but profits could not improve proportionately. He has attributed contraction of margins to the significant cost increases. The net profit after tax has also been affected due to increase in surcharge on income-tax which would apply to the 1979 profits. He, however, expects that with continued strong consumer demand for its products, the company should be able to achieve satisfactory improvements in sales and profits in the second half of 1979.

Referring to the company's production capacity, Mr Senior has said that the annual productive capacity as endorsed by the central government in February last, is much below the company's installed capacity and also the actual production achieved during 1978 in respect of tooth paste and tooth powder. The company has made a representation to the government for endorsing its current producsive capacity on its registration certificate. It has pointed out that this capacity was established as permitted under the Industries (Development and Regulation) Act in good faith and with a view to meeting the increasing needs of the Indian public. The chairman has described the government's assumption as "totally unrealistic" that the production of the present large-scale units could be reduced drastically and that growing consumer needs could be met through production by the small-scale sector.

George Williamson

George Williamson (Assam) Limited is entering the capital market on August 6, 1979 with a public issue of 700,000 equity shares of Rs 10 each for cash at par. The company was incorporated on March 15, 1977 in the state of Assam, with a view to take over the business and undertaking in India of twelve sterling tea companies, in order to comply with the provisions of FERA, as directed by the Reserve Bank of India. These sterling companies have in the aggregate eighteen tea estates with a total area under tea of nearly 8.000 hectares situated in the highly productive tea growing areas in the state of Assam and produce quality teas well known in the world markets. This group is one of the larger tea exporters in the country, both in terms of quantity and realisations.

Out of the total proposed equity capital of Rs 350 lakhs, Rs 245 lakhs worth of equity shares credited as fully paid up have been issued at par, for consideration other than cash, to Williamson Tea Holdings Limited and Boreili Tea Holdings Limited, both of the United Kingdom, in accordance with the approved schemes of amalgamation. These non-resident shareholding companies have extentive global plantation interests and their experience in tea growing and distribution is unmatched.

Allotment Scheme

Rs 700,000 worth of equity shares have been reserved for firm allotment to public financial institutions and Rs 24.50 lakhs worth of equity shares will be allotted to Bishnauth Tea Company Limited and Dimakusi Tea Company Limited, both of 4, Mangoe Lane, Calcutta 700001. The balance Rs 350,000 worth of equity shares have been reserved for the employees and working directors of the company who are Indian nationals resident in India. The non-resident shareholding will be 70 per cent after the proposed issue.

The company is being managed by a board of directors consisting of men with considerable experience and proved abilities in the tea industry. Mr B.M. Khaitan is the chairman of the company and Mr R.B. Magor is the deputy chairman. The production of tea increased from 9,900,000 kgs. in 1968 to 16,800,000 kgs. by 1978. The yield per hectare in kgs. has also risen in the tea estates from 1323 in 1961 to 2121 by 1978—which is one of the highest in the tea plantation industry.

TELCO

On a representation by the Bombay Shareholders' Association, management of Tata Engineering and Locomotive Company has decided to make an increased rights issue of bonds to individual shareholders. The management has decided to move an amendment to the original resolution whereby bonds of the value of Rs 9 crores, out of the total of Rs 24.10 crores to be offered to the public, will be set aside to give preferential allotment of a maximum of six bonds to each individual shareholder. The preferential allotment will be made to those individual shareholders who having fully subscribed to the bonds to

BEAS CONSTRUCTION BOARD (P.W)

Tender Notice No. 104/BCB/Global/BPP & SSC→——/F.63B Dated : 6.7.79

Sealed Global Tenders are invited in duplicate by Er. G. S. Khurana, Superintending Engineer, Design & Procurement Dte., on behalf of Addl. Chief Engineer/Electrical, (PP & EHV) Beas Design Directorate, SCO No. 39, Sector 26, Madhya Marg, Chandigarh, for the following equipment:-

Description	Brief Specification	Qty. Required
1	2	3
Interfacial Tentiometer (as per specification mentioned opposite) required for testing & commissioning of 400 KV Class Power Transformers to be installed at Dehar & Panipat.	Suitable for rapid and accurate measurement of surface Tension & Interfacial tension of insulating oil. Portable & ready to use, complete with all accessories. Measuring Range: 0-90 Dynes/cm Accuracy: 0.5 Dynes/cm	2 Nos (1 set consigned to Nangal N.R. and other to Panipat N.R.)

The above equipment is required, for testing of insulating oil of the various 11/400 K.V. and 400/220 KV Power Transformers to be installed at Dehar & Panipat by the Beas Project. The manufacturers/supplier from U.S.A., U.K., Japan, West Germany, Switzerland, Italy and also those from Rupee payment area sources countries can quote.

The tenderers should see the following general terms and conditions and quote accordingly:-

1. Price: Firm price should be quoted on F.O.R. Destination basis. Extra charges such as excise duty and sales tax should be separately quoted.
2. Indian Agent Commission: The Indian Agent Commission, where applicable shall be paid in Indian Rupees at exchange rate prevalent on the date of opening of tender.
3. Damages for delay in Delivery: The supplier shall be liable to pay damage due to late delivery of material at the rate of ½% of the cost of undelivered material per week of delay, subject to maximum of 10% of the total cost of undelivered material.
4. Terms of payment: i) 90% of the value of goods against R/R through Bank. (The Bank charges will borne by the supplier.)
    ii) 10% to be paid against Bank Guarantee to be furnished by the supplier for 10% value of contract price valid for a period of 12 months from the date of commissioning or 24 months from the date of receipt of material at site (i.e. taking over certificate date) whichever is later.
5. Warranty:- The Tenderer shall be responsible to replace free of cost any part of instrument which under normal & proper use proves defective in material/workmanship within 12 months from the date of commissioning or 24 months from the date of receipt of material at site, whichever is later, on written notice by the purchaser.
6. The tenders shall be received upto 2.00 P.M. and opened at 3.00 P.M. on 15.10.79.
7. The tenders should be valid for nine months from the date of opening. Right to ignore tenders without assigning any reason is reserved.

davp 856(44)/79

which they have entitlement as shareholders apply for further bonds as a member of the public. The scheme of preferential allotment is subject to the approval of the Controller of Capital Issues and the financial institutions.

Arlem Breweries

The directors of Arlem Breweries have proposed a dividend of 12 per cent for the year ended March 31, 1979.

According to preliminary figures the turnover has increased from Rs 1.96 crores in the previous year to Rs 2.08 crores in 1978-79 and the gross profit from Rs 22.62 lakhs to Rs 28.13 lakhs. After providing for depreciation, there is a profit of Rs 19.06 lakhs against Rs 13.73 lakhs. Out of this, Rs 2.86 lakhs has been utilised to write off miscellaneous expenditure. The proposed dividend will require Rs 9.60 lakhs (Rs 8 lakhs).

Southern Hydrocarbons

Southern Hydrocarbons, promoted by the Tamil Nadu Industrial Development Corporation and Mr Venkataswamy and associates in the joint sector, is setting up a project at Lakshmanapatti in a backward district of Pudukottai in Tamil Nadu with a capacity of 1,000 tonnes each of acetic anhydride and acetic acid. In the second phase, the company will manufacture 900 tonnes of monochloro acetic acid and 3,000 tonnes of carboxy-methyl cellulose and carboxy-methyl starch per annum.

The project will utilise abundantly available industrial alcohol as raw material. The basic technical knowhow and basic engineering for the manufacture of acetic anhydride and acetic acid is being given by its Glasgow consultants. The first phase of production is expected to commence next month.

The total cost of the project is estimated at Rs 2.20 crores. The company is making a public issue of 294,000 equity shares of Rs 10 each to raise a part of the finance required for completion of the project. The subscription list will open on August 8 and close on August 21 or earlier but not before August 10.

The project is proposed to be financed by a share capital of Rs 60 lakhs, term loans of Rs 177 lakhs, a central sabsidy of Rs 15 lakhs and unsecured loans from the promoters of Rs 8 lakhs. The promoters have already taken up equity shares worth Rs 30.60 lakhs and the balance of Rs 29.40 lakhs is now being offered to the public.

Ajanta Tubes

With expansion of sales from Rs 3.10 crores to Rs 7.49 crores, Ajanta Tubes has achieved a gross profit of Rs 36.36 lakhs in the year ended January 31, 1979, as against only Rs 1.47 lakhs in the previous year. This outcome has followed a higher production of 18,666 tonnes of pipes of its own and 3,144 tonnes for outside job work as compared to 14,152 tonnes and 3,302 tonnes, respectively, produced during 1977-78.

After providing Rs 13.51 lakhs (Rs 11.74 lakhs) for depreciation and Rs 5.70 lakhs (Rs 4.60 lakhs) for investment allowance, there is a net profit of Rs 17.14 lakhs compared to a net loss of Rs 14.86 lakhs. Together with the balance brought forward from the previous year, the surplus of Rs 22.89 lakhs is being carried to the balance sheet.

The directors complain that the company did not get even half of its requirements of steel. Had steel been available according to its requirements, the results would have been much better. The management is pursuing the matter with the authorities for increase in allocation of steel to the company.

East India Hotels

The directors of East India Hotels have recommended a final dividend of 15 per cent making a total of 25 per cent for the year ended March 31, 1979, and issue of bonus shares in the proportion of one such share for every five held.

The directors have also decided to issue 10,05,500 equity shares as 'rights' shares and 12,50,000 shares as public issue at a premium, subject to the consent of the Controller of Capital Issues. Besides, it is proposed to issue 75,000 'B' redeemable cumulative preference shares at par carrying dividend at 11 per cent per annum by converting the existing 9.5 per cent preference shares.

Vickers Sperry

The directors of Vickers Sperry of India have decided to maintain the dividend at 15 per cent for the year ended March 31, 1979.

According to preliminary figures, the company has earned a lower gross profit of Rs 85.26 lakh against Rs 88.27 lakh in the previous year despite a higher turnover of Rs 4.46 crore against Rs 4.02 crore. After depreciation of Rs 22.96 lakh (Rs 26.58 lakh) and taxation Rs 30.50 lakh (Rs 31.80 lakh), the net profit is slightly better at Rs 31.80 lakh against Rs 29.89 lakh.

Out of this, Rs 5 lakh (Rs 4.50 lakh) has been allocated to the investment allowance reserve. The proposed dividend will require Rs 19.80 lakh (same).

Production during the first four months of the current year was hampered by the severe power shortage, but it was held at a reasonable level with the aid of two diesel generator sets. Orders are being received at a level higher than that of last year, but deliveries are behind schedule due to the continued power shortage.

Testeels

The directors of Testeels Ltd which returned to the dividend list last year, have recommended a dividend of 16 per cent (12 per cent) for 1978-79. Its sales, during the year, have improved to Rs 8.15 crores (Rs 7.63 crores) and the gross profit to Rs 65.49 lakhs (Rs 62.73 lakhs), depreciation claims Rs 15.30 lakhs and investment allowance Rs 2.59 lakhs. The company has not provided for any tax liability as it believes no tax liability exists.

In the last decade, sales have increased ten times from Rs 80.61 lakhs in 1968-69 to Rs 814.88 lakhs in 1978-79. During the same period the gross profit has risen by Rs 65.49 lakhs from a loss of Rs 6.67 lakhs. It is in this decade that the company has set up the second unit in GIDC Industrial Estate at Vatva. apart from modernising and expanding the facilities in Dehgam. As a result of modernising, the company has been able to completely wipe out the carry forward loss of Rs 39.85 lakhs, providing for the arrears of depreciation Rs 15.33 lakhs and has cleared arrears of preference dividends amounting to Rs 11.69 lakhs.

In 1978-79 the company

completed and handed over 115 KV transmission line to Electricite du Laos as also 132 KV transmission line to the department of Electricity, Nepal. The company has also secured an export order valued at $6.88 million from the Electricity Generating Authority of Thailand.

Universal Cables

Universal Cables Limited have declared a dividend of 15 per cent for the year ended March 31, 1979 on the increased equity capital, as against 20 per cent in the previous year.

Gross profit for the year ended March 31 was Rs 449.93 lakh. Of this Rs 251.11 lakh were earmaked for taxation, Rs 61.72 lakh for depreciation and Rs 36.50 lakh for investment allowance. The net profit after taxation was Rs 100.61 lakhs.

The turnover increased from Rs 20.56 crores in 1977-78 to Rs 28.54 crores in 1978-79, due to an improvement in the sales of cables from Rs 18.04 crores to Rs 25.75 crores.

Ministry of Industry

DEPARTMENT OF INDUSTRIAL DEVELOPMENT

Public Notice

It is the accepted policy of Government of India to encourage employment of persons belonging to Scheduled Castes and Scheduled Tribes in industry and business. With a view to having an idea about the extent of employment of Scheduled Castes and Scheduled Tribes in the private sector, Commercial and industrial undertaking, it has been decided that the Office of the Economic Adviser to the Government of India, Ministry of Industry should collect, on voluntary basis, such information from these units. Similar information from the Public Sector Undertakings is already being collected by the Bureau of Public Enterprises.

2. All private Industrial and Commercial concerns engaged in the manufacture, assembly, packaging, preservation or processing of goods or in mining or in generation and distribution of electricity or any other form of power or engaged in trade and commerce, including banking, financial corporations, shipping and navigation, and road Transport services, brokers dealing in shares, stocks and securities and commodities, advertising consultants and all other concerns working for profits, are being requested to furnish the required information as on 1.1.1979 in the prescribed forms (I and II) given below to the office of the Economic Adviser, Ministry of Industry, Udyog Bhavan, New Delhi on or before the 31st August, 1979.

3. Private concerns having branches in different places are requested to furnish one consolidated data covering all branches.

FORM—I

Particulars on employment of Scheduled Castes and Scheduled Tribes (Permanent as well as, Temporary) in Private firms/concerns, as on 1st Jan. 1979.

1. Name and address of the firm:
2. Nature of business done:
3. Whether the firm is an Indian Company (i.e. having majority Indian participation in Company's total equity capital) or foreign company registered abroad or subsidiary of a foreign concern or otherwise managed controlled by foreign concern. (In case, the firm is an Indian Company, please Indicate the percentage position of Indian shareholding in company's total equity capital).
4. Total number of employees (Numbers to be given) as on: 1st January, 1979.
5. Total number of Scheduled Castes and Scheduled Tribes employees (in all categories, irrespective of scales of pay), out of firm's total strength as at Sl. No. 4 above.

Scheduled Castes	Percentage to total as at Sl. No. 4.	Scheduled Tribes	Percentage to total as at Sl. No. 4.	Total of Both	Percentage to total as at Sl. No. 4.

6. Particulars of Scheduled Castes and Scheduled Tribes (Permanent and Temporary) Salary-groupwise position.

Salary Group (including allowances, etc.)	Total No. of employees (SC/ST and others)	Total number of	
		Scheduled Castes	Scheduled Tribes
1. Post carrying a pay or a scale of pay with a maximum of not less than Rs. 1,300/-.			
2. Post carrying a pay or scale of pay with a maximum of not less than Rs. 900/- but less than Rs. 1,300/-.			
3. Post carrying a pay or a scale of pay with a maximum of over Rs. 290/- but less than Rs. 900/-.			
4. Post carrying a pay or a scale of pay with a maximum of which is Rs. 290/- or less.			
Total			

Signature
Designation

FORM II

Particulars on employment of Scheduled Castes and Scheduled Tribes (Permanent or Temporary), as shown in Form-1, as on 1st January, 1979.

Name of the firm:

1	2	3	4	5	6	7	8	9	10	11	12
Name of employees	Whether SC or ST	If so, whether permanent or temporary	Designation or post held	Date of appointment	Field of Specialisation (Managerial@ or technical@@	Basic pay per month	Scale of pay if any	All other allowances (to be given separately	Total monthly emoluments (i.e, basic pay, all other allowances, Commission, bonus, perks, etc.	Salary Group (as mentioned in Form-I) to which the employees belongs.	Remarks

@ Including posts of Accountants and Legal Advisers.
@@ Including Engineering & Scientific Posts.

Signature
Designation

davp 563(86)/79

Licences and Letters of Intent

The following licences and letters of intent were issued under the Industrial (Development and Regulation) Act 1951 during the month of May, 1979. The list contains the names and addresses of the licensees, articles of mannfacture, type of licences—New undertaking (NU), New article (NA), Substantial Expansion (SE), Carry on Business (COB), Shifting and Annual Installed Capacity. Details regarding licences and letters of intent revoked, cancelled or surrendered are also given.

Licences Issued

Metallurgical Industries

M/s. Gupta Iron & Brass Works Ltd., 29, Najafgarh Road, New Delhi-110015.—29 Najafgarh Road. Union Territory. of Delhi—G.I. Buckets—72 tonnes (C.O.B.)

M/s, Mohan Meakin Breweries Ltd., Unit: Mohan Engineering Works, Mohan Nagar, Ghaziabad—Mohan Nagar, Distt. Ghaziabad, U.P.—Cast Iron, Alloy Castings—500 tonnes (N.A.)

M/s Northern India Iron Press Works, Industrial Area Aishbagh, Lucknow 226004—Industrial Area Aishbagh. Lucknow. U.P.—Builders Hardware—1,528 tonnes (C.O.B.)

M/s. Gupta Iron & Brass Works Ltd., 29, Najafgarh Road, New Delhi-110015—29, Najafgarh Road, Union Territory of Delhi—Builders Hardware—Annual Capacity on the basis of maximum utilisation of plant and machinery—446 tonnes (C.O.B.)

M/s. Electrosteel Castings Ltd., 4, B.B.D. Bagh (E), Calcutta-1, Ghazlabad, U.P.—Steel Ingots/Billets—36,000 tonnes (N.U.)

Prime Movers

M/s. Kirolskar Oil Engines Ltd., 18 Laxmanrao Kirloskar Road, Kirkee, Poona-411003—Kirkee, Poona, Maharashtra—Stationery Diesel Engines for Power Generation, Capable of developing 500-3550 HP at 1000 RPM—500 cylinders Nos. (S.E.)

Electrical Equipment

M/s. Maharishi Institute of Creative Intelligence (MICI), Shankaracharya Nagar, Rishikesh, Uttar Pradesh—Rishikesh, U.P.—Video Magnetic Tapes—140 million running meters (N.U.)

M/s. U.P. Electronics Corporation Ltd., 4, Prag Narain Road, Lncknow-226001—Lucknow, U.P.—Remote Data Telemetry/Logging Systems, Key to Disc Data Entry Systems, Intelligent Terminal Data Entrv Systems—15 Nos Systems, 75 Nos Systems, 150Nos. systems respectively (N.A.)

M/s. Philips India Ltd., Shivasagar Estate, Block 'A', Dr. Annie Besant Road, Worli, Bombay-600018—Lonikalbhor, Poona, Maharashtra—Carbon Potentiometers—5 millon nos. (after expn.) (S.E.)

M/s. Devidayal Metal Industries Pvt. Ltd., Post Box No. 6215, Gupta Mills Estate, Reay Road, Darukhana, Bombay-400010—Lal Bahadur Shastri Marg, Bhandup, Bombāy,—G.L.S. Bayonet Caps—48 million numbers (N.A.)

M/s. Grandlay Electricals India, 3/4, Asaf Ali Road, New Delhi-110002—Union Terriory of Delhi—1. Control Cables Armoured/Unarmoured Signaliing and Trailing Cables—7.76 M.C.M.—2. Power Cables (other than PVC/VIR cables reserved for small scale sector)—2,090 Kms. (C.O.B.)

Transportation

M/s. Scooters India Ltd., Post Bag No. 1, Sarojini Nagar P.O., Lucknow, 226008 (U.P.)—Lucknow, U.P.—Mopeds (50cc) 50,000 Nos. (N.A.)

Miscellaneous Industries

M/s. Jandwani Poly Produets Pvt. Ltd., Kothi No. 348, Sector 35-A, Chandigarh—Village Bhankarpur, Near Dera Basi, Distt. Patiala, Punjab—LDPE Co-extruded Film—600 tonnes (N.U.)

M/s. Chetna Polycoats Pvt. Ltd., 5184, Ballimaran, Delhi-110006—Tehsil Bhiwadi, Distt. Alwar, Rajasthan—Polyurethane and Acrylic coated fabrics—30 lakh square metres (N.U.)

M/s. Surat Agro Plastics Pvt. LTD., Road No. 4, Industrial Estate, Udhna-394210 (Distt. Surat)—Tehsil Ankleshwar, Distt. Bharuch, Gujarat—Wide Width LDPE (Low Density Poly-Ethylene) Films (width of 3 metres and above)—2,100 tonnes (N.U.)

Industrial Instruments

M/s. Keralā State Electronics Development Corporation Limited, Keltron House, Vellayambalalam, Trivandrum-695001-Aroor, Distt. Alleppey, Kerala—1. Electronics transmitters. 2. Analong electronics control modules—3. Panel mounted instruments, recorders, indicators, control stations.—Electro-pneumatic convertors.—5. Pneumatic actuators with positioners 6. Control cabinets—3,000 numbers (N.U.)

Chemicals other than Fertilisers

M/s. Vijaya Oxygen Co. Ltd., 270, Palace, Upper Orchard, Bangalore-560006—Munirabad, Distt. Raichur, Karnataka.-Oxygen Gas— 1 million cubic metres (N.U.)

M/s. Dharuhera Chemicals Ltd.. S-100, Panchshila Park, New Delhi-110017—Tehsil Dharuhera, Distt Mahendragarh, Haryana—Sulpnuric Acid 30,000 tonnes (N.U.)

M/s. Camlin Pvt. Ltd., J.B. Nagar, Andheri, Bombay-400059.—J.B. Nagar, Andheri Bombay, Mahārashtra—Artists Colours—254 kiloliters (C.O.B.)

M/s. Atul Chemical Industries Ltd., Baldote Bhavan, 6th Floor, 117Maharshi Karve Marg, Opp. Churchgate Station, Bombay-400020—Vapi, Gujarat—Formaldehyde 14,400 tonnes Hexamine 600 tonnes—Pentaerpthritol—1,200 tonnes (N.U.)

M/s. Andhra Pradesh Industrial Gases Ltd., 16-2-674/2, Malakpet, Hyderabad-500036—Paloncha, near Kothagudem, Distt. Khammam, A.P.—Oxygen Gas—I million cubic metres (N.U.)

M/s. Cibatual Ltd., P.O. Atul-396020, District Valsad, Gujarat.—Tehsil Atul, Distt. Valsad, Gujarat—Hexamethylene Tetramine (Hexamine)—900 tonnes (N.A.)

Dyestuffs

M/s. Colour Chem Ltd., Ravindra Annexe, Dinshaw Vachha Road, 194, Churchgate Reclamation, Bombay-400020.—Thana, Maharashtra,—Brilliant white dyestuffs.—150 tonnes (N.A.)

Drugs and Pharmaceuticals

M/s. Bengal Chemical & Pharmaceutical Works Ltd., 164, Maniktala Main Road, Calcutta-700054.—Calcutta, W.B.—Ampicillin Dry Syrup BPC.—12,000 Kgs. (N.A.)

Bengal Chemical & Pharmaceutical Works Ltd., 164, Maniktala Main Road, Calcutta-100054–Calcutta, W.B.—1. Erythromycin Estolate Tablets (I.P.)—25 lakh nos—2. Erythromycin Stearate Tablets (I.P.) 25 lakh nos—3. Erythromycin Drysyrup 5 tonnes equivalent to 10,000 litres 4. Ethambutol Tablets (I.P.)200 mg.—90 lakh nos. Ethambutol tablets (I.P.) 400 mg. —10 lakh nos. (N.A.)

Textiles

M/s. Durga Woollen Industries Private Limited, A-49, Friends Colony, New Delhi-110014—Industrial Area, Banmore, Morena, M.P.—Shoddy Yarn—600 spindles (N.U.)

Paper and Paper Products

M/s. Ansal Properties & Industries Pvt. Ltd., 115-Ansal Bhawan, 16, Kasturba Gandhi Marg, New Delhi-1—Tehsil Sikandrabad, Distt. Bulandshahr, U.P.—1. M.F. Variety unbleached paper—2,640 tonnes per annum (existing) 5,000 tonnes after expansion—2 M.G. Variety Papers—5,000 tonnes (after. expn.) (S.E.)

M/s. Paper & Pulp Conversions Ltd., 1183, Shivajinagar, Fergusson College Road, Pune 411004—Khopohi, Distt. Kolaba —Paper and Paper Board—12,000 tonnes (existing) 20,000 tonnes (after expn) (S.E.)

Food Processing Industries

M/s. Indian Fibres Ltd., 31, Netaji Subhas Road, Calcutta-700001.—Tehsil Sangonor, (Area Durgapura), Jaipur, Rajasthan —Guar Gum Powder 1,800 M.T.—Guar Gum Granules 5,400 M.T. (C.O.B·)

M/s. Kaira District Co-operative Milk Producers', Union Ltd., Amul Dairy, Anand 388001. (Gujarat)—Tehsil Anand, Distt. Kheda, Gujarat,—Baby Foods 11,725 tonnes (existing) 14,650 tonnes (after expn.) The expanded capacity for baby foods would be within the overall combined capacity for baby foods and milk powder namely, 18,950 tonnes per annum. (S.E).

Cement and Gypsum Products

M/s. Associated Cement Companies Ltd., Cement House, 121, Maharshi Karve Road, Bombay-4,00020—Wadi, Distt. Gulbarga, Karnataka—Portland Cement—400,000 tonnes (existing) 600,000 tonnes (after expn.) (S.E.)

Letters of Intent

Metallurgical Industries

M/s. Galada Associated, 1-294, 1st Floor, Taranaka, Hyderabad-500017, Andhra Pradesh—District Kurnool, A.P.—i. Aluminium Silicon Mater Alloy—3300 tonnes ii. Hyper Eutectic Concast Billets and Forging Stock—3300 tonnes iii. Eutectic Aluminium Casting Alloys.—4200 tonnes—iv Notched bar for Steel Deoxidation.—4200 tonnes (N.U)

M/s. Shalimar Wires & Industries Ltd., 27A, Camac Street, Calcutta-700016. West Bengal.—Satpur, Nasik, Maharashtra —1. Brass Strips. 1800 tonnes 2. Phosphor Bronze Strips. —150 tonnes (N.A.)

M/s. Karnatka State Industrial Investment & Development Corporation Ltd., 'Barinivas, 34, Cunningham Road, Bangalore-560052—Karnataka—Cold Rolled Stainless Steel Strip for Razor Blades—1000 tonnes (N.U.)

M/s. Rapsri Engineering Industries Pvt. Ltd., 39 & 40/2, Gowdanpalaya, Subramanyapura Post, Bangalore-560061—Karnataka—Non-ferrous Copper Base Alloy Castings—210 tonnes (S.E.)

M/s. Ellora Engineering Co. Pvt. Ltd., Athwani Chambers, 4th Floor, 16, Mahatma Gandhi Road, Poona-411001.—Aurangabad, Maharashtra—High Quality Close Tolerance Die Forgings. —7,200 tonnes (N.U.)

Electrical Equipment

M/s. Ken Electricals, Post Box No. 56, Rewa-486001. (M.P.) —Rewa, M.P.—Conmutator Coppe rStrips, Profiles, Segments and Bar Copper Strips.—1,500 tonnes (N.U.)

M/s. West Bengal Electronics Industry Dev. Corporation Ltd, 225-E Acharya Jagadish Chandra Bose Road, Calcutta-700020. (W.B.)—W.B.—Hybrid Circuit—2.45 lakh nos. (N.U.)

M/s. Punjab Biomedical Equipment Ltd., D-33, Industrial Focal Point, S.A.S. Nagar (Mohali)-160051, Punjab—S.A.S. Nagar (Mohali), Tehsil Kharar, Distt. Ropar, Punjab,—i) Portable X-Ray Machines. 100 nos. ii) Dental X-Ray Machines —100 nos. (N.A.)

M/s. Atlas Wires Pvt. Ltd., M-133, Connaught Place, New Delhi-110001.—Panch Mahal, Gujarat,—i) Synthetic Enamelled Copper Winding Wires upto 41 SWC 300 tonnes ii) Synthetic Enamelled Copper Winding Wires 42 SWG and thinner.—50 tonnes (N.U.)

Mr. Bijoy Kumar Mishra, C/o. Mr. B. Mishra, Retired S.D.M., B.C. Sen Road, Balasore, Orissa.—Santacruz Electronics Processing Zone.—Wire wound resistors.—15 million nos. (N.U.)

Mr B.R. Thukral, 1C/54 Nissen Hut, NIT. Faridabad-121001—Tehsil Rewari, Distt. Mahendergarh, Haryana—1. Contractors 2. Auxiliary Relays and overload relays. 3. Motor Starters 4. Push buttons 5. Control Switches 6. Pilot lamps 7. Moulded case circuit breakers 100 amps and above 8. Motor control centres—200,000 nos. 100,000 nos. 75,000 nos. 200.000 nos. 800,000 nos. 100,000 nos. 10,000 nos. 1,000 nos. respectively (N.U.)

Transportation

M/s. Andhra Pradesh Industrial Dev. Corpn. Ltd., B-1-174 Fateh Maidan Road, NSF Building, Post Box No. 13, Hyderabad-500004.—A.P.—Bimetal Bearings (Main bearings, bushes and thrust washers)—6.0 million nos. (N.U.)

M/s. Ideal Jawa India Pvt. Ltd., Industrial Estate, Mysore-570002—Mysore, Karnataka.—Motorcycles (250 cc & 50/60 cc) 30,000 nos. (existing) 42,000 nos. (after expn.) (S.E.)

Machine Tools

Mr O.M. Somany, 12/1, Judges Court Road, Calcutta-700027—Gujarat— Hydraulic Equipment (excluding hydraulic jacks upto 30 tonnes and other items of hydraulic equipments reserved for the small-scale sector)—50,000 numbers (N.U.)

M/s. Escorts Transmissions Ltd., 18/4, Mathura Road, Faridabad (Haryana)—Faridabad, Tehsil Ballabgarh, Distt. Gurgaon, Haryana.— Hydraulic Gear Oil Pumps.—3,000 nos. (existing) 18,000 nos. (after expn.) (S.E.)

Miscellaneous Industries

M/s. Shalimar Industries Pvt. Ltd., 76, Jhotwara Industrial Estate, Jaipur—Rajasthan— Synthetic Diamonds (Industrial)— 1.3 million carats (N.U.).

Neena Somani, Somani Bhavan, Bazar Sitaram, Delhi-110006—Tehsil Sikanderabad, Distt. Bullandshahar, U. P.— i) P.V.C. Rigid pipes (100 mm and above) ii) Flexible P.V.C. Pipes (100 mm and above) iii) Fittings (other than those reserved for small scale—800 tonnes, 800 tonnes and 400 tonnes respectively (N.U.)

M/s. Climax Pipes Pvt. Ltd., 18-B, Brabourne Road. Calcutta-700001.—Haldia, W.B.—i) Rigid PVC Pipes and pipes of high density Polyethelene (Rigid PVC pipes above 100 mm diametre and polyethelene pipe flexible above 100 mm diametre.—2,200 to 4,200 tonnes (after expn.)—ii) Polyethylene PVC blown films above 1 metre width. (Except Polyethylene films thickness less than 0.10 mm).—800 tonnes (S.E.)

Fertilisers

M/s. The Dharamasi Morarji Chemical Co. Ltd., Prospect Chambers, 317/21, Dr. Dadhabhoy Naoroji Road, Fort, Bombay-400001.—Kumhari, Distt. Durg, M.P.—Single Superphosphate—161,000 tonnes (after expn.) (S.E.)

M/s. Punjab State Industrial Development Corporation Ltd., S.C.O. 54, 55 & 56, Sector 17-A, P. Box No. 81, Chandigarh.—Tehsil Balchaur, Distt. Hoshiarpur, Punjab.—1. Single Super Phosphate 66,000 tonnes—2. Sulphuric Acid—33,000 tonnes (N.U.).

Chemicals other than Fertilisers

M/s. Air Reduction Co. Ltd., Kishori Niwas, Birhana Road, Kanpur (U.P.)—Ghaziabad, U.P.—Nitrogen Gas (By-product) —0.50 million cub. metres (N.A.).

M/s. Swastik Household & Industrial Products, G-40, Connaught Circus, New Delhi-110001.—Mohali, Punjab—Industrial Explosives (Slurry type)—10,000 tonnes (N.U.).

M/s. Swastik Household & Industrial Products, Dvn. of Ambalal Sarabhai Enterprises Pvt. Ltd., 13/15, Walchand Hirachand Marg, Ballard Estate, Bombay-400038.—Ambernath, Thane, Maharashtra—Fatty Acid (crude distilled and/or hydrogenated)—8,000 tonnes.

M/s. Industrial Oxygen Company (P) Ltd., 68-B, Jolly Maker Chambers, Nariman Point, Bombay 400021.— Tehsil Mandi Gobindgarh, Distt. Patiala, Punjab.— i) Oxygen Gas.—1.00 million cu. meters—ii) D.A. Gas—0.20 million, cu. meters (N.U.)

Mr. Prem Chand Arya, E-106, Mansarover Garden. New Delhi—Tehsil Sikandrabad, Distt. Bullandshahr, U.P.—1. Single Super Phosphate—66.000 tonnes—2. Sulphuric Acid—33,000 tonnes (N.U.).

M/s. Devidayal (Sales) Pvt. Ltd., Post Box No. 6219, Tulsiram Gupta Mills Estate, Reay Road, Bombay-400010.—Tehsil Kalol, Distt. Panchmahals, Gujarat.—Methyl Parathion Technical—500 tonnes (N.A.).

M/s. Ballarpur Industries Ltd., (Chemical Division), Thapar House, 124 Janpath New Delhi-110001.—Singach, Jamnagar, Gujarat.— i) Bromine/Bromides—250 tonnes— ii) Potassium Schoenite—3,000 tonnes—iii) Potassium Chloride—1,000 tonnes iv) Magnesium Sulphate—200 tonnes. (N.A.)

M/s. Kolhapur Sugar Mills [Ltd., Gasaba Bavada, Kolhapur-6—Kasaba Bavada, Tehsil Karvir, Distt. Kolhapur, Maharashtra.—1. Glacial Acetic Acid—2,500 tonnes (existing 9,124 tonnes (after expn.)—2. N-Butanol—900 tonnes (existing) 2,190 tonnes (after expn.) (S.E.).

M/s. Southern Gas Ltd., 'Lovedale', Church Landing Road, Cochin-16, (Kerala).—Nimbut, Taluk Baramati, Distt. Pune, Maharashtra.— i) Oxygen Gas. 1.00 million cub. meters—ii) Nitrogen Gas.—0.50 million cub. meters. (N.U.)

M/s. Adarsh Chemicals & Fertilizers Ltd., Post Box No. 13, Udhna-394210. Distt. Surat (Gujarat).—Udhna, Tehsil Choryasi, Distt. Surat, Gujarat.—1. Single Superphosphate.— 136,000 tonnes (after expn.)—2. Sulphuric Acid.—56,100 tannes (after expn.) (S.E.)

M/s. Agriculture Sales Corpn. Dharampura Bazar, Patiala, Punjab.—Backward Distt. Punjab.—1. Single Super Phosphate 66,000 tonnes—2. Sulphuric Acid.—33,000 tonnes (N.U.).

A.L.A. Chemicals Ltd., Mahalaxmi Chambers, 22, Bhulabhai Desai Road, Bombay-400026.—Tehsil Ambernath, Distt. Thane, Maharashtra.—Stabilisers and additives for PVC and other Polymers.—3,250 tonnes (after expn.) (S.E.)

M/s. Asiatic Oxygen and Acetylence Co. Ltd., 8, B.B.D. Bag East Calcutta-700001.—Kumhari, Distt Rajpur, M.P.—Nitrogen Gas—0.50 million cubic metres (N.A.)

Mr M.S. Doshi, Doshi Synthetics Ltd., Ujamvilas, Azadnagar Society, Vile Parle (West), Bombay-400056.—Kandla Free Trade Zone—Pre-oriented yarn (ployester yarn).—3,000 tonnes (N.U.)

M/s. Lupin Laboratories Pvt. Ltd., 159, C.S.T. Road, Kalina. Santacruz (E) Bombay-400029.—Ankleshwar, Distt. Broach Gujarat.—1. Betamethasone—300 Kgs. 2. Dexamethasone—400 Kgs. 3. Belomethasone—50 Kgs. 4. Flucinclone Acetonoid —150 Kgs. 5. Triamcinolone—250 Kgs. (N.U.)

M/s. The Anglo-French Drug Co. (Eastern) Ltd.. 28 Tardeo Road, Bombay-400034.—Peenya Industrial Area, Distt. Yeshwanthapur. Bangalore, North Karnataka.—**Basic Substances.**—1 Chlordiazepoxide.—800 Kgs. 2. Diazepam—500 Kgs. 3. Nitrazepam—500 Kgs. 4. Norgestral—10 Kgs. 5. Ethinyl Estradiol.—20 Kgs.—**II Formulations**:—1. Sedovit 10 mg tablets —25 milllon tablets (Chlordiaxepozide)—25 million tabs 2. Flavit 5 mg tablets (Diazepam)—25 mlllion tabs. Flavit 10 bk/2ml ampoule.—5 Kilo ltrs Flavit 2mg/5ml syrup.—50 Kilo ltrs. 3. Nitravit 5 mg tablets (Nitrazepam)—25 million tabs. Nitravit 5mg/ml drops—5 Kilo ltrs. 4. Novestry Tablets (ethinye Estradiol 0.05 mg.) —Norgestron 10.05 mg per tab).—14 million tabs. 5. Oestryl tablets (Ethinyl Estradiol 0.05 mg per tab).—16 million tabs. (NA)

M/s. Boehringer-Knoll Ltd., United India Building, P. Mehta Road P. Box No. 1174, Bombay-4000001—Roha, Maharashtra.—Alpha-Methyl Dopa—25 tonnes (N.U.)

M/s. Alembic Chemicals Works Company Ltd., Alembic Road, Baroda-390003, Gujarat State.—Baroda, Gujarat—Oxytericycline HCL I.P Injection 22 cc vials.—5 tonnes (N.A.)

Paper and Paper Products

Mr Ramesh Kumar Seth, 28, Panch Sheel Nagar. Raipur (M.P.)—Tehsil Dharsiwa, Distt Raipur. M.P.—Writing and Printing Paper—9,900 tonnes (N.U.)

M/s. Ballarpur Industries Ltd., Thapar House, 124, Janpath, New Delhi-110001—Chandrapur, Maharashtra—Writing and Printing Paper—11,500 tonnes (S.E.)

Food Processing Industries

M/s. Britannia Biscuit Co. Ltd., 15, Taratola Road, Calcutta-700053.—Hoshangabad, M.P.—1. (i) Soya meals—36,000 tonnes (ii) Soya flour—25.000 tonnes (iii) Protein Concentrate By Products—10,000 tonnes 2. Lecithin (food grade and commereial grade)—1,000 tonnes 2. Soyabean oil—6,000 tonnes (N.U.)

Glass

M/s. Modern Floated Glass Manufacturing Corporation, Shanti Sadan Estate, Kothari Chambers, (2nd Floor), Opp. Cinbat Tower, Mirzapur Road, Ahmedabad-1.—Vapi, Gujarat, —Float Glass—10 million sq. metrs (in terms of 2 mm thickness (N.U.)

Cement and Gypsum Products

M/s. Asbestos and Jointings Manufacturing Co. (P) Ltd., 15. Parsi Panchyat Road, Andheri (East) Bombay-400069.—Broach, Gujarat.—Compressed asbestos fibre jointing sheets.—3,080 tonnes (after expn.) (S.E.)

M/s. Associated Cement Co. Ltd., Cement House, 121 Maharsi Karve Road Bombay-400020.—Tehsil Chittapur, Distt. Gulbarga, Karnataka.—Portland Cement—6 lakh tonnes per annum, 16 lakh tonnes (after expn.) (S.E.)

M/s. Cement Corporation of India Ltd., 5-A, Bahadur Shah Zafar Marg New Delhi-110002.—Teshil Tandur, Distt, Hyderabad, A.P.—Portland Cement—10 lakh tonnes (N.U.)

Industrial Licences Surrendered, Cancelled or Revoked

(Information pertains to particular licences only)

M/s. Madan Industries Ltd., Uttar Pradesb—Uttar Pradesh—Cotton Yarn.—(Surrendered)

M/s. Electronics Components Manufactuers Pvt. Ltd., New Delhi—Uttar Pradesh—Electrolytic Capacitors—(Revoked)

M/s. Bright Brothers Ltd., Bombay.—SEEPZ, Bombay—Cassettes and tapes—(Cancelled)

M/s. The Tuticorin Spinning Mills Ltd., Tuticorin—Tamil Nadu—Cotton Yarn—(Surrendered)

M/s. Keshavlal Talakchand & Co. Bombay.—Gujarat—Cotton Yarn—(surrendered)

M/s. Soma Textiles, Ahmedabad—Gujarat—Cotton Yarn—(Surrendered)

M/s. Sri Rani Lakshmi Ginning Spinning and Weaving Mills Pvt. Ltd., Madurai, Tamil Nadu—Tamil Nadu—Cotton Yarn—(Surrendered)

M/s. Salem Textiles Ltd., Tamil Nadu—Tamil Nadu—Cotton Textiles—(Revoked)

M/s. Annamaliar Mills Pvt. Ltd., Tamil Nadu—Tamil Nadu—Cotton Textiles—(Revoked)

Mr Bal Krishan Single, Punjab.—Punjab—Cotton Yarn—(Revoked)

M/s. Sree Narayan Textiles Ltd., Tamil Nadu—Tamil Nadu—Cotton Yarn—(Revoked)

M/s. General Industrial Society Ltd, Calcutta—West Bengal—Cotton Textiles—(Revoked)

M/s. West Bengal Industrial Development Corpn. Ltd., Calcutta.—West Bengal—Cotton Yarn—(Revoked)

M/s. Dolan Jeener Chaudhry Electro Optics Pvt. Ltd., Bombay.—Maharashtra—Fibre Optics—(Revoked)

Letters of Intent Cancelled or Lapsed

(Information pertains to particular letters of intent only)

M/s. Industrial Electronics Pvt. Ltd., Bangalore.—Karnataka—Connectors—(Cancelle)

M/s. Traco Cable Company Ltd., Kerala, Eranakulam, Cochin.—Kerala—Telephone Cables—(Cancelledd)

M/s U.P. State Industrial, Development Corpn. Ltd., Kanpur (U.P.)—Uttar Pradesh—Sodium Chlorate—(Lapsed)

M/s. Dhrvua Woollen Mills pvt. Ltd., Bombay—Maharashtra—Wool Tops (Combed Wool).—(Lapsed)

M/s. Raymond Woollen Mills Ltd., Bombay.—Maharashtra—Wool Tops (Combed Wool)—(Lapsed)

M/s. Swastik Rubber Products Ltd., Pune.—Maharashtra—Hoses—(Cancelled)

M/s. National Textile Corporation Ltd., Bangalore.—Karnataka—Cotton Yarn—(Cancelled)

Mr Arvind Kumar Goyal, Madras—Tamil Nadu—Roller Flour Mills Machinery etc.—(Cancelled)

Mr B. Premalatha, Andhra Pradesh—Andhra Pradesh—Furfural—(Lapsed)

M/s. Todi Industries Pvt. Ltd. Bombay.—Maharashtra—Hydraulic Steering Gears for Marine Use—(Cancelled)

M/s. Allied Steel Ltd., Calcutta—Madhya Pradesh—Steel Castings—(Cancelled)

M/s. Punjab Sulphur Products Ltd., New Delhi—Punjab—Alumina Ferric—(Lapsed)

Changes, in the Names of Owners or Undertakings

(Information pertains to particular companies only)

Punjab—M/s. Hindustan Milk, Food Manufactures Ltd.—to HMM Limited

Maharashtra—M/s. Repetition Parts Pvt. Ltd.—to—Transmissions Pvt, Ltd., Bombay

Maharashtra—Indian Vegetable Products Ltd—to—I.V.P. Ltd.

Kerala—M/s. Jayshree General Agencies, Kerala—to—M/s. West Cost Industrial Glasses Ltd.

Andhra Pradesh—M/s. VMA & Associates New Delhi—to—M/s- Metengeast Ltd., Hyderabad.

Uttar Pradesh—Agarwal Coal Co.Pvt. Ltd.,—to—Bhagwati Vanaspati Industries Ltd.,

Madhya Pradesh—M/s. Dewas Steels Ltd.—to—M/s. M.P. Alloy Casting Ltd.

Tamil Nadu—M/s. Tamil Nadu Industrial Development Corporation Ltd.,—to—M/s. Southern Hydro-Carbons Ltd.

Uttar Pradesh—M/s. U.P. Electronic Corporation Ltd.,—to—M/s.Uptron Shreetronix

Tamil Nadu—M/s Orientronics Equipments Pvt. Ltd.,—to—M/s. Orient Vision Ltd., Madras

Namrup—Fertilizer Corporation of India Ltd.—to—M/s. Hindustan Fertilizers Corpn. Ltd,

Barauni—Fertilzer Corporation of India Ltd.—to—M/s. Hindustan FertilizersCorpn. Ltd.

Durgapur—Fertilizer Cordoration of India Ltd.,—to—M/s. Hindustan Fertilizers Corpn. Ltd.

Haldia—Fertiliser Corporation of India Ltd.,—to—M/s., Hindustan Fertilizers Corpn Ltd.

Trombay—Fertiliser Corporation of India Ltd.—to—M/s. Rashtirya Chemicals & Fertilizers Ltd., Chembur, Bombay.

Nangal—Fertilizer Corporation of India Ltd.—to—M/s. National Fertilizers Ltd. New Delhi.

Petrochemicals : progress and prospects

RECORDS AND STATISTICS

Although of comparatively recent growth, the petrochemical industry, which came to be established for the first time in India in mid-sixties, has made rapid strides during the past two decades. Encouraged by the prospects of higher availability of the basic raw materials, the Planning Commission set up a working group in May 1978 to estimate the future demands of petrochemicals. Recent developments in the industry and some of the projections of demand made by the working group are given below.

PETROCHEMICALS ARE derived from crude petroleum and its products. Broadly they consist of:

1. Synthetic fibres/yarns such as polyester staple fibre, acrylic, fibre, polyester filament yarn and nylon filament yarn and their intermediates such as DMT (Dimethyle Tere Phthalate), MEG (Monoethylene Glycol), acrylonitrile, caprolactum;

2. Plastics such as low-density polyethylene (LDPE), high-density polyethylene (HDPE), polypropylene (PP), polystyrene (PS) and polyvinyl chloride (PVC) and their intermediates such as ethylene, propylene, styrene;

3. Artificial rubbers such as poly-butadiene rubber (PBR) and styrene butadiene rubber (SBR) and their intermediate butadienes;

4. Basic aromatics such as benzene, toluene, orthoxylene and paraxylene;

5. Other chemicals used in plasticisers and synthetic detergents, such as phthalic anhydride, linear alkyl benzene; etc;

6. A host of other chemicals used in dyestuffs, insecticides, emulsions, solvents drugs etc.

The consumption of petrochemicals has registered spectacular growth in the developed countries. Their consumption in the developing world is also picking up fast. The consumption of three major groups amongst them, namely, plastics, synthetic fibres/yarns and synthetic rubber in the world is currently estimated around 90 million tonnes per year. This consumption in our country too has grown considerably. It is at present around 300,000 tonnes per year.

The petrochemical industry came to be established in this country for the first time in mid-sixties when a small complex near Bombay based on naphtha was set up. It has grown significantly since then with the going on stream of a giant petrochemicals complex at Baroda. Another one is being put up at Bongaigaon in Assam.

Growth Potential

The present state of the consumption of petrochemical products in India and the growth potential they have is summarised below:

Because of the limited availability and high prices of most of the petrochemical products, in India their applications have mainly centred round urban areas. This is specially true in the case of synthetic fibres and yarns. The prices of pure synthetic and blended fabrics are so high that they are practically out of the reach of the masses. An effort has to be made to increase the consumption of synthetic/blended fabrics in the rural sector because of the obvious advantages of durability, wash and wear properties, etc.

Scope in Agriculture

There is a great potential for the use of plastics in the field of agriculture, such as LDPE film for mulching, canal lining, food storage, etc, and PVC for pipes for rural water supply and irrigation and polypropylene and HDPE fabrics for making bags for storage of fertilisers and chemicals, etc. Plastics are also fast replacing conventional building materials such as wood, metals, etc, and are being increasingly used in making machine components and parts. With the increasing populalion, the requirements of food, clothing and shelter would be increasing continuously. To satisfy these requirements, we have to increase the productivity in agricultural sector by use of the same land. Water management and productivity, therefore, will have to be increased. Plastics are vital for water management, food storage, etc.

The increasing requirements of clothing can only be met by adding synthetic fibres to the available natural fibres. Similarly the increasing requirements of housing can be met by the judicious use of synthetic materials like PVC (for flooring and roof sheets, etc) and polyethylene film (as a protection against rain) and thermosetting resins.

The discovery of crude oil and gas in the Bombay High and other offshore oil fields has brightened the future prospects of the growth of the petrochemical industries in India. The additional potential availability of some of the important raw materials during the next decade are estimated as below:

	Qty in MTA
Ethylene	400,000
Propylene	60,000—100,000
Para-Xylene	130,000
Benzene	300,000

As mentioned above, a major step in petrochemical production in India was taken with the setting up of a giant petrochemicals complex at Baroda by the Indian Petrochemicals Ltd (IPCL) at an approximate cost of Rs 350 crores. Its licensed products range in given in Table I.

All these items with the exception of MEG, acrylonitrile and acrylic fibre have already started commercial production. These three items are also likely to start production soon. The IPCL has also been licensed to produce 55,000 tonnes of PVC and

10,000 tonnes of acrylates per annum.

At Bongaigaon, in Assam, a refinery and petrochemical complex is being set up at a total cost of approximately Rs 197 crores. It is licensed to produce annually in addition to refinery products, 45,000 tonnes of DMT and 30,000 tonnes of polyester staple fibre.

Table I

Products Range of IPCL, Baroda

Product	Capacity in MTA
P-Xylene	17,000
Ortho-Xylene and mixed Xylenes	23,500
DMT	24,000 (Being expanded to 30,000)
Ethylene	130,000
Propylene	78,000
Butadiene	22,000
Benzene	23,600
LDPE	80,000
Polypropylene	30,000
Acrylonitrile	24,000
Acrylic Fibre	12,000
Polybutadiene Rubber	20,000
Linear Alkyl Benzene	30,000
MEG	20,000

Encouraged by the prospects of higher availabilities of the basic raw materials, various private agencies and government bodies have tried to estimate the future demands of various petrochemical products. The Planning Commission set up a working group in May 1978 to go into the future of the petrochemical industry during the sixth Plan period and to suggest measures for the best utilisation of the available resourses. The working group has just submitted its report and the recommendations contained therein are under the examination of the government.

Given below are the figures of current production of the main petrochemicals and their demands as projected by the working group on petrochemicals.

Synthetic Fibres/Yarns: At present, there are five units in the private sector producing polyester staple fibre with a total licensed capacity of about 46,500 tonnes per annum and a unit of capacity of 30, tonnes a year is being set up the public sector at Bong gaon, which is likely to st production by early 1983. It hoped that a plant with capacity of 45,000 tonnes p annum will be set up in t

Table II

Production, Imports and Demand of Petrochemicals

(In thousand tonne

	Production			Import	Demand	
	1975-76	1976-77	1977-78	1977-78	1982-83	1987-8
Polyester Staple Fibre	16.0	22.6	23.1	8.22	106-147	136-19
PFY	2.29	2.77	4.2	2.01	16	30
NFY	14.0	15.8	16.4	1.37	47	90
Acrylic Fibre	—	—	—	8.22	20	26

Table III

Production and Demand of Important Fibre Intermediates

(In thousand tonnes)

	Production			Demand	
	1975-76	1976-77	1977-78	1982-83	1987-88
DMT	19.02	24.09	25.56	131	184-241
Caprolactum	13.27	17.14	15.81	69	125
MEG	—	—	—	59-76	80-102

Table IV

Production and Demand to Plastic Resins

(In thousand tonnes)

	Production			Estimated demand		
	1975-76	1976-77	1977-78	1978-79	1982-83	1987-8
LDPE	27.64	26.04	28.45	75	124	24
HDPE	20.02	24.88	25.59	45	71	11
PP	—	—	—	6	41	6
PVC	43.82	47.50	59.02	55	150	31
PS	9.20	13.40	13.57	15	31	4

public sector in the sixth Plan period.

There are eight units in the private sector producing polyester filament yarn with a total capacity of about 4,500 tonnes per annum. A joint sector unit, M/s Petrofils Cooperative Ltd, (PCL) Baroda, with a capacity of 3,500 tonnes has just gone into production. It is hoped that the plant of the PCL will be soon expanded to an annual capacity of 7,000 tonnes.

New Units

There are eight units in private sector producing nylon filament yarn with a licensed capacity of about 28,000 tonnes. It is hoped to set up a plant of 15,000 tonnes capacity in the public sector in the sixth Plan period. No unit is yet producing acrylic fibre in the country, but the IPCL with a capacity of 12,000 tonnes and J.K. Synthetics with a capacity of 4,000 tonnes have been licensed and are under implementation.

Table II gives the figures of production and demand (as estimated by the working group) of the above petrochemicals and Table III for important fibre intermediates.

At present, only the IPCL with a rated capacity of 24,000 tonnes per annum is producing DMT and Gujarat State Fertiliser Corporation (GSFC) is producing caprolactum with a rated year capacity of 20,000 tonnes. The BRPL is setting up a DMT unit of capacity of 35,000 tonnes and a private party (M/s Bombay Dyeing) has just been granted a letter of intent for the manufacture of 60,000 tonnes of DMT.

Plastics: Till recently, only two private parties with a total licensed capacity of 32,000 tonnes per annum were engaged in the production of LDPE. But with the going on stream of the IPCL with a capacity of 80,000 tonnes, this product is now available in plenty. In fact, its current production can for outstrip the current demand.

There is only one private party at present producing HDPE with a licensed capacity of 30,000 tonnes per annum and this material is in short supply. The IPCL is the only unit in India licensed to produce polypropylene, with a capacity of 30,000 tonnes.

PVC is being produced by five private parties with a total licensed capacity of about 86,000 TPA. The demand of this item is much higher than the current production, but when the IPCL with a capacity of 55,000 tonnes comes into the market, things are expected to ease to a great extent.

Polystyrene is being produced by two private parties with a total licensed capacity of about 23,500 tonnes. There are occasional shortages of the material due to temporary stoppage of production in either of the units.

Table IV gives the figures of production, consumption and demand of the important plastic resins.

Synthetic Rubbers: There is only one unit in the private sector producing SBR with a licensed capacity of 30,000 tonnes a year and the IPCL is the only unit licensed to produce PBR with a capacity of 20,000 tonnes.

The figures of demand and production of synthetic rubbers are given below:

Production:

1975-76—25,190
1976-77—23,230
1977-78—28,330

Demand:

1982-83—50,000
1987-88—50,000

TABLE V

Demand and Production of Some of the Important Petrochemicals

(In thousand tonnes)

Product	Production			Demand	
	1975-76	1976-77	1977-78	1982-83	1987-88
Benzene	71.22	88.72	91.67	264.60	440.80
Toluene	15.29	18.73	19.95		
O-Xylene	7.89	14.41	17.69	51.60	91.00
P-Xylene	12.41	12.23	13.30	119	313
Phthalic Anhydride	6.43	14.88	19.08	39.7	71.10
Linear Alkyl Benzene	—	—	—	67.00	107.90
Styrene	16.44	23.00	24.76	27.00	90.00
Butadiene	16.32	15.99	16.51	47	104
Propylene	32.77	34.84	37.71	147	247
Ethylene	64.26	71.72	69.73	334	633

To cater for the estimated demand of basic chemicals, plastics, synthetic fibres and synthetic rubbers by 1982-83 and 1987-88, the reconstituted working group on petrochemicals has suggested setting up of the following projects:

Olefins complexes, including all downstream plants for intermediates and plastics.	About Rs 600 crores
Aromation complexes, including all downstream plants for intermediates and synthetic fibres.	About Rs 1,500 crores

New central council of ministers

The new government at the centre, formed under the prime ministership of Mr Charan Singh, was sworn in on July 28. On that day eight cabinet ministers, including the prime minister and the deputy prime minister took the oath of office. The cabinet was expanded further on July 30 with the addition of another 11 cabinet ministers and seven ministers of state. One more minister of state took the oath on July 31. It, therefore, currently consists of the prime minister, a deputy prime minister and 17 other ministers of cabinet rank and eight ministers of state. Mr Charan Singh proposes to expand his ministry further in the near future.

The following are the names of ministers who have already taken charge, along with their portfolios:

Cabinet Ministers

1. Prime minister, Mr Charan Singh: all portfolios not yet assigned to any other minister.
2. Deputy prime minister, Mr Y.B. Chavan: Home Affairs.
3. Mr H.N. Bahuguna: Finance
4. Mr S.N. Mishra: External Affairs.
5. Mr C. Subramaniam: Defence.
6. Mr K. Brahmananda Reddy: Industry.
7. Mr Hitendra Desai: Commerce, Civil Supplies and Co-operation.
8. Mr H.R. Khanna: Law, Justice and Company Affairs.
9. Mr T.A. Pai: Petroleum and Chemicals with the additional charge of Railways for the time being.
10. Mr Biju Patnaik: Steel, Mines and Coal.
11. Mr K.C. Pant: Energy.
12. Mr Mohammed Shafi Qureshi: Tourism and Civil Aviation.
13. Dr Karan Singh: Education and Social Welfare.
14. Mr Purushottam Kaushik: Information and Broadcasting.
15. Mr Brahm Prakash: Agriculture and Irrigation.
16. Mr Ram Kinkar: Works and Housing.
17. Mr Zulfiquarullah: Communications.
18. Mr Fazlur Rehman: Labour and Parliamentary Affairs.
19. Mr Rabi Ray: Health and Family Welfare.

Ministers of State

1. Mr Bhanu Pratap Singh: Rural Development (independent charge)
2. Mr Janeshwar Mishra: Shipping and Transport (independent charge)
3. Mr Jagbir Singh
4. Mr Nar Singh
5. Mr Dhanik Lal Mandal
6. Dr Henry Austin
7. Mrs Rashida Haque Choudhury
8. Mr T.S. Shrangare

No portfolios have yet been allotted

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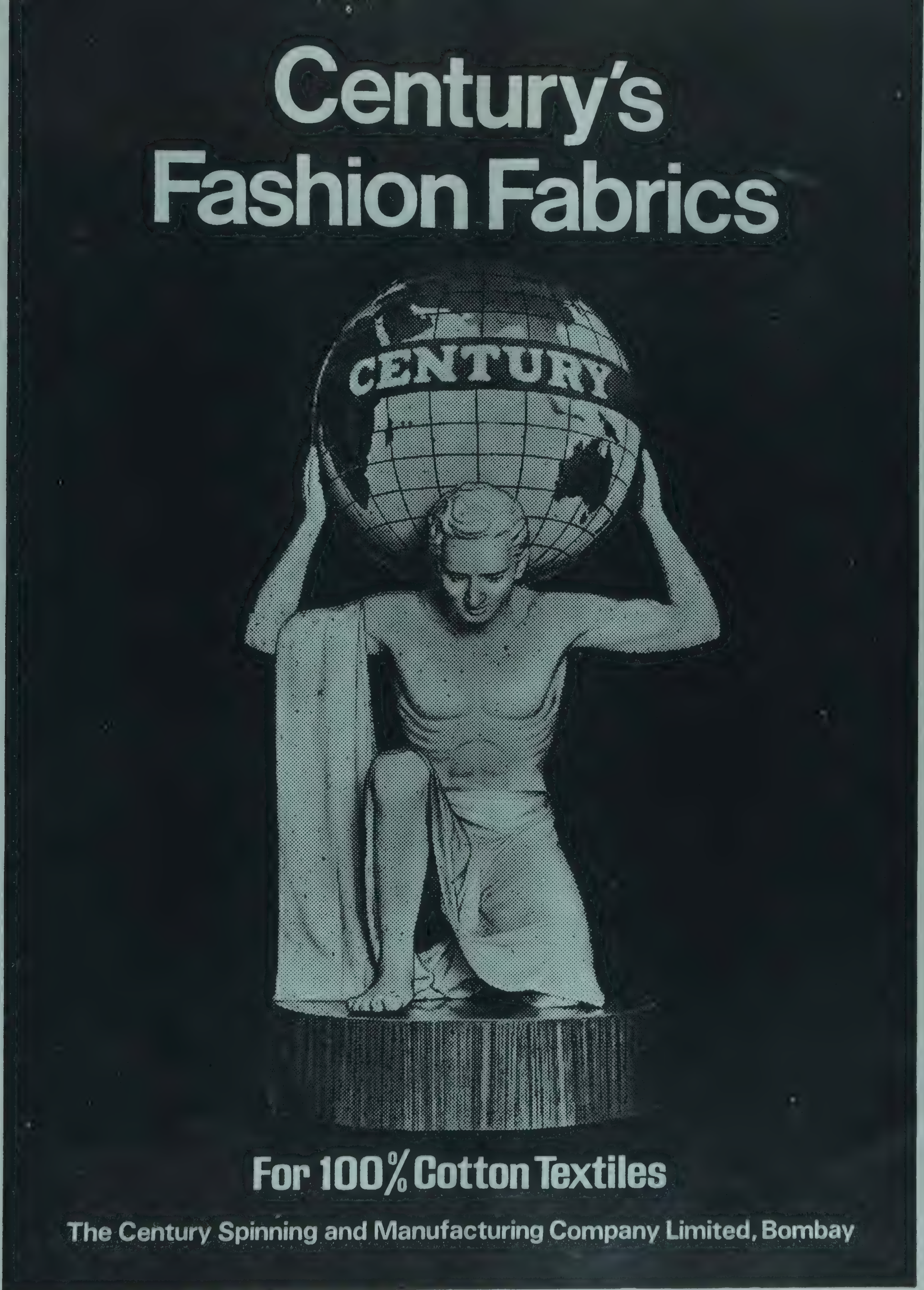
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Through the eyes of a child

If there were no minty toothpastes
To start off my day
No bright coloured shoes
No play books and pictures
No glue to make albums
No soap bubbles gay
I just can't imagine
With what I would play!

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ECONOMIST
AUGUST 10, 1979

Focus on agro-chemicals

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Farm output prospects

NOTWITHSTANDING THE fact that the Crop Weather Watch group of the central ministry of Agriculture, headed by Mr S.P. Mukherjee, has assessed that the overall rainfall situation in the country has improved considerably in the recent days and the undulations in agricultural output have been reduced significantly in the recent years through extension of irrigation facilities, popularisation of the use of improved seeds, fertilisers and pesticides, some setback to farm production this year is not ruled out in knowledgeable circles.

The extent of the setback, it is pointed out, of course, will depend on the future course of monsoons, specially their behaviour later this month and in September which is of crucial importance. On present indications, foodgrains output during the current kharif season, it is feared, might show a decline of three to four million tonnes from the last year's level of 130.5 million tonnes.

This, however, may not cause much concern as the recent record wheat procurement has raised the stocks with the government to nearly 20 million tonnes. But the significant point to be noted is that the shortfall primarily will be in the paddy crop. This may create some difficulties even though the present stock position of rice too is quite comfortable.

Deficient rains in September might also lead to some delay in the sowing of the rabi crops. But since these crops have become largely independent on the vagaries of weather, the impact of the deficiency of rains on them might be minimal.

With a view to off-setting to the extent possible the adverse impact of delayed rains on the paddy crop, it has been suggested that community nurseries should be raised in the irrigated pockets for transplantation in other areas during the rains. Foliar spray or booster dose of fertilisers has also been recommended to promote the growth of plants.

The other two crops which are expected to be affected this year are jute and oilseeds. The output of jute and mesta is said to have been irretrievably affected due to inadequacy of early rains over the eastern jute belt. The total output this year, it is felt, may be around only 6.5 million bales. The situation, of course, is expected to be kept under control as the last year's yield was a record at 8.29 million bales.

The groundnut crop is stated to have been hit in Gujarat, Andhra Pradesh and Karnataka. The heavy import programme of edible oils is expected to ensure sufficient supplies for the consumers.

The two crops which may not be very much affected by insufficient rains are cotton and pulses : they do not require much water during the plant growth period.

Rainfall was inadequate till the middle of July in West Bengal, eastern Uttar Pradesh, eastern Madhya Pradesh, Gujarat, Saurashtra-Kutch area, coastal Konkan, interior Maharashtra, coastal Andhra Pradesh and Telengana, the deficiency being from 26 to 54 per cent. The situation since then is said to have improved in several areas. The states which are stated to have received normal or above-normal rains include Punjab, Haryana, western Uttar Pradesh, Delhi and Rajasthan in the north and Kerala in the south. Andhra Pradesh, Karnataka and Maharashtra have received good rains recently.

In view of the likely setback to rice production this year, the government is disinclined to enter into any large export commitments. Although Tamil Nadu has been allowed recently to export 30,000 tonnes of rice, the Brazilian efforts to secure some rice imports from India have not been received very warmly. Perhaps the matter may be reconsidered in the near future if the monsoons behave better in the coming weeks and the crop prospects improve.

Insufficient rains, it is feared, will create some problems on the energy front too. Last year's impressive improvement in hydel generation may not be repeated this year, although the reservoir level position of hydel projects has been found to be quite satisfactory, except in the case of Panchet Hill of the DVC. This necessitates concerted efforts at raising thermal generation which unfortunately leaves much to be desired due to the difficult coal supplies. The expectation that coal production would improve following the settlement of the wage dispute in the industry, of course, has not been fulfilled as yet and the situation continues to cause concern. The difficulties in the movement of coal by railways too continue unabated.

FERA issue boom

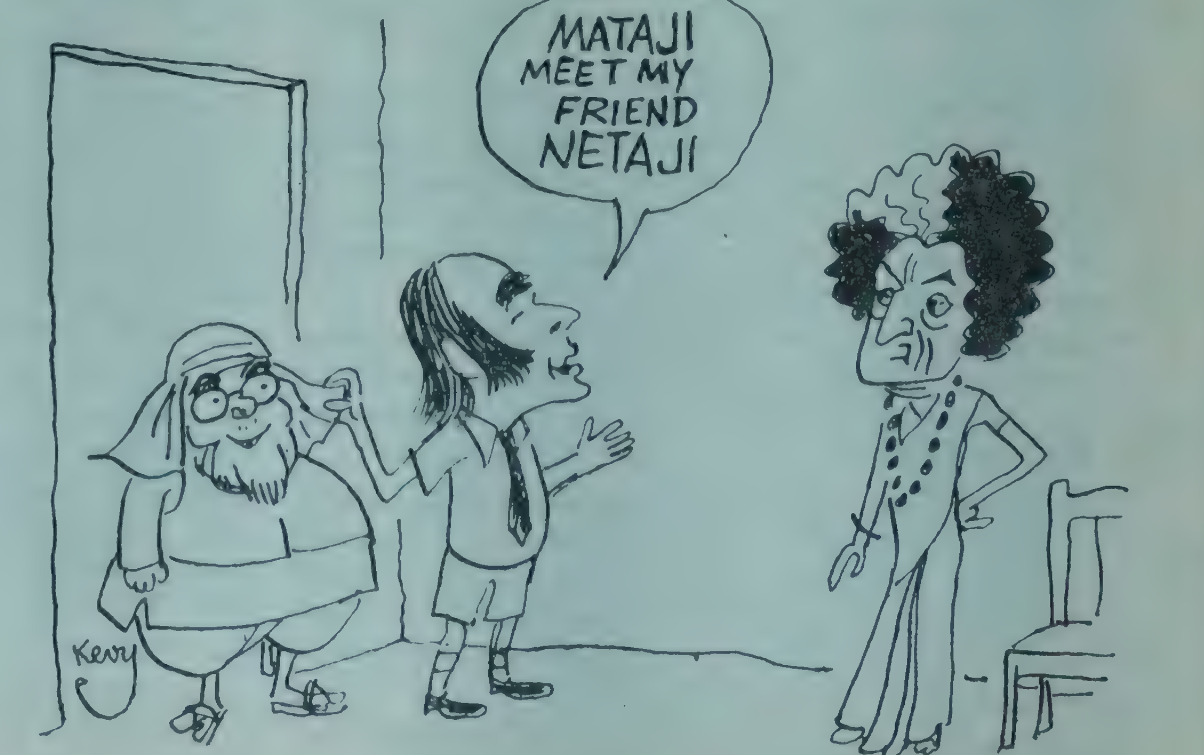
THE BOOM in FERA issues has been in evidence for over two years now and the capital market has been witnessing activity of a new type which has brought into its fold a new class of investors. The compulsion to comply with the provisions of the Foreign Exchange Regulation Act has brought out clearly how foreign owned companies have been dominating particular sectors of our industrial economy and how they have grown immensely in stature without inviting public attention and without importing their own resources from the countries of their origin. The vast reserves built up by almost all companies clearly suggest that efficient management, modern techniques of production and distribution and timely implementation of expansion schemes have yielded gratifying results and secured for the managements concerned a firm grip in vital directions.

In the earlier stages, the drain of foreign exchange resources through under-invoicing of exports and employment of technical and managerial expatriate personnel was sizeable. It was only after the new industrial units under Indian auspices came on a large scale and began to function efficiently that this drain could be minimised. The process of dilution of foreign ownership in the equity capital of FERA companies started even in mid-sixties when the public limited companies like Union Carbide, Indian Aluminium, Hindustan Lever, Philips India (now Pieco Electronics), Indian Explosives, to mention some important examples, were reducing foreign ownership with the issue of right shares to Indian nationals and offered also for sale equity shares by the majority shareholders to the Indian investing public. But the process gained momentum only when the provisions of FERA came to be implemented and various ministries negotiated with the industrial units concerned for appropriate dilution of ownership of foreign interests.

The procedures adopted by the Reserve Bank and the Controller of Capital Issues when tackling individual cases have necessarily been contradictory and arbitrary in character though efforts have been made to ensure that there is no excessive capitalisation of the value of the assets created over a long period and the repatriation of dividend income, even after the change in the complexion of FERA companies, is not large. But the question may well be asked whether there will be a significant reduction in remittances by way of royalties and dividend payments and whether the foreign interests have not been afforded an opportunity to secure a recognised value for their net assets. Also, in the event of a further dilution of foreign ownership through offers of sale or after expansion schemes have been completed with right or public issues being made available to Indian investors, the value of foreign equity holdings would not have greatly appreciated.

When there is reliance on foreign capital in some directions for industrial development, advantage accruing to foreign participants in enterprises being developed with their efforts cannot be avoided. It is also not desirable that there should be discouragement to genuine enterprise which will be highly beneficial to the economy. It cannot, however, be disputed that more decisive guidelines could have been adopted for minimising foreign ownership, by compelling sales of larger blocks of equity shares of majority shareholders instead of issuing additional equity capital for minimising the proportion of foreign ownership when additional funds were not required or expansion schemes were permitted undeservedly. This is not to suggest that expansion of industrial capacity should not take place even in the desired directions especially when these schemes could be implemented within a short period at a cost much lower than would be involved if entirely new projects were to be brought into being.

Several industrial units, which have a monopoly or semi-monopoly in respect of production and marketing of important items, have been allowed to expand their capacities. Some others have been intelligently increasing their turn-over and widening the range of production of high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value items even with no large fresh investment. And, on the plea of their activity belonging to the core sector there has been no dilution in foreign ownership below a particular level and reserves too have been allowed to be capitalised to the maximum extent for issuing bonus shares.

While on the subject, it is pertinent to ask what are the criteria adopted for full capitalisation of reserves resulting in a big increase in the equity base before foreign interests have been advised to issue additional capital to Indian residents or offer for sale large blocks of shares of the diluted capital. A purely ethical approach may probably dictate the procedure adopted in quite a few cases. But if it is discovered that easy money had been made and large remittances had been effected by Indian branches of foreign companies or wholly owned subsidiaries in the shape of profits, purchase of raw materials at high prices, payments towards royalty and salaries to technical and managerial personnel and the like, it would have been far more appropriate to restrict the equity base and pay part of the consideration in the form of loans repatriable on a stipulated basis, after the discharge of all liabilities, on a defined basis over a period.

It is true that this procedure cannot be adopted where corporate entities already exist and there is no need for integrating the activities of branches of foreign companies or wholly-owned subsidiaries or it is not necessary to form rupee counterpart companies for taking over assets and liabilities of companies incorporated in foreign countries with the approval of the government and the Reserve Bank.

a liberal deal

The sterling tea companies particularly have been accorded a liberal deal, and on the plea that a large portion of their output of tea was being exported, most of them have been allowed to dilute their capital for minimising foreign ownership to 74 per cent. While care has been taken to ensure that undetermined and undischarged tax liabilities will be protected by having a lien on the equity holdings of foreign interests and the amounts payable to them by way of dividends against outstanding loans, the valuation of assets has been on a liberal basis because of the spurt in the average of profits due to the boom in 1976-77. It is also not clear why different procedures have been adopted when determining the equity base and also the loan component of the amount that may be paid to the vendors when transferring assets and liabilities of the sterling companies to the newly formed counterpart rupee companies. It has not also been stipulated that there should be a reduction in foreign ownership to at least 51 per cent in stages when Tata Finlay and a few others have reduced their foreign ownership to 40 per cent even in the beginning.

additional advantage

It has also not been properly explained how the premium has been fixed when issuing additional capital or when the majority shareholders offer for sale large blocks at a premium when the benefit of the latter will not accrue to the companies concerned. With transfers of foreign ownership of flourishing companies where the foreign participants had not deployed large funds of their own, initially or over a period, it would have been normally expected that the new investors would get some advantage out of accumulated reserves in the shape of a premium which was significantly less than that dictated by the net worth of the shares concerned. It has, however, happened in many instances that the premium demanded when issuing additional capital or effecting offers of sale has been far in excess of the net worth involved. The 'loading' has obviously been done on the basis of earnings per share.

The problems involved have clearly been highly complex and important decisions are yet to be taken in regard to the dilution of foreign ownership in some pharmaceutical companies. The FERA boom is likely to be in evidence for several more months in spite of uncertain trends in stock markets following unexpected developments in the political situation. The observations here are confined only to the floatations for public absorption. There are many instances where negotiated transfers of blocks of share have taken place from the foreign owned companies to the financial institutions on the understanding that convertibility clauses will not be incorporated in loan agreements. These transfers incidentally achieve the desired dilution of foreign ownerships. There have also been cases of negotiated transfers of blocks of shares where private limited companies have been functioning on a highly profitable basis and it was felt by foreign interests that there was no need for expanding the equity base for reducing foreign ownership. It will be highly interesting to attempt a dispassionate analysis of the significance of the boom in FERA issues. This will be helpful in determining how the change-over has been attempted and what is the cost of the community. The new investors, however, are feeling happy as their acquisition has been highly profitable though there has been only a small appreciation in many tea shares over issue prices. Whatever may be the disadvantage or the benefit arising out of the FERA boom, an opportunity has been afforded to the outsider, as stated earlier, to understand how foreign companies have been operating in this country and how impressive results can be achieved with proper planning, efficient management and intelligent deployment of resources.

Impact of imports

IN HIS address to the annual general meeting of the Calcutta Import and Export Trade Association, held on July 26, Mr R. S. Johar, the chairman, made several constructive suggestions to modify the import policy so as to enable industry to make better use of its installed capacity. He said that the government should straightaway allow an increase of 10 to 15 per cent on the automatic licences, based on the previous consumption level, in view of the world-wide inflation and the sharp fluctuations in the exchange rates of major currencies. He warned that if this was not done, the physical quantum of imports would decline, resulting in heavy losses to industry in the replenishment of imported raw materials and components. Besides, there are consumable items whose imports are not allowed although they are essential for maintaining and augmenting production.

The government should favourably consider these proposals so that the impact of the liberalised import policy will be fully felt on industrial production. In fact, the policy should be constantly reviewed and, where necessary, changes should be made promptly in order to enable industry to get its requirements at the most competitive prices.

Mr Johar also suggested that raw materials for export production must be available to the manufacturer at international prices. The problem of determining such prices, however, is not easy. But in his opinion, this difficulty can be solved in many ways. For example, international publications like the London Metal Bulletin give the spot rates. Besides, the exporter can negotiate a reasonable price with his suppliers. In respect of canalised materials, exemption can be given from customs and countervailing duty and the normal service charges to the extent these materials are imported against REP licences. The government should examine the financial and administrative implications of these proposals and take effective steps to strengthen the competitiveness of our export industries.

Another proposal made by Mr Johar was that 100 per cent export-oriented units should be given the same facilities in the form of export assistance as are available to those set up in the free trade or export processing zones. This scheme looks attractive but its implementation is likely to create problems.

export houses

The scheme of export houses was introduced many years ago with a view to imparting some dynamism to our export drive. It was expected that with their vast contacts in the international markets and their wide commercial experience, they would be able to contribute a great deal to develop and diversify our exports. They were also called upon to give special attention to promote the exports of the small and medium scale industries. From time to time, the export houses have been given various incentives and facilities to enable them to play their role. It is therefore, distressing to learn that most of these houses at present have lost their interest and enthusiasm. According to Mr Johar, some of them are now dormant while others are "seriously questioning" their utility. The only special facility they enjoy at present is their entitlement to the additional licences but these are also subject to face value restrictions.

As export promotion has now assumed greater urgency and importance, the government should reconsider its policy to export houses. It perhaps may not readily agree to the proposal to permit them to import canalised items side by side with the state agencies. Although there is a great deal of merit in this proposal, the government may hesitate to accept it on the ground that it will dilute the public sector's role in the country's foreign trade. But in the interest of the country some healthy competition between the two sectors even in the field of exports and imports should be encouraged.

close liaison

India's foreign trade policy will have better prospects of implementation if there is close liaison between government and the business community. But regrettably this has not been taking place. For example, the government of India recently set up a committee under the chairmanship of Mr P. L. Tandon, Director-General of National Council of Applied Economic Research, to make recommendations for a long-term export strategy during the eighties. It will also identify major markets and exportable items. But, according to Mr Johar, none of the apex chambers of commerce or the major export promotion councils have been represented on this committee. He suggested that "full opportunity" should be given to all the concerned sections of industry and trede to express their viewes on the committee's terms of reference.

Mr Johar also regretted that the eastern regional export/import advisory committee had not met for the last two or three years. Our export prospects are being affected by the increasing trends towards protectionism, excessive shipping freight rates, persistent troubles in the ports, and other factors. It is all the more essential, therefore, that government and industry should work in close cooperation in implementing the export and import policy.

Indo-Brazilian cooperation

THE INDO-BRAZILIAN trade and economic cooperation should receive great impetus as a sequel to the deliberations held here last week between the State Trading Corporation of India and a delegation of CIA, Brazileira De Entrepostos E Commercio or COBEC, a trading organisation of the government of Brazil, which was led by the organisation's director president, Mr Sylvio Massa De Campos. The two sides agreed to promote cooperation with a view to developing two-way trade on a stable and long-term basis.

The immediate effect of the meeting has been that the State Trading Corporation has entered into a direct agreement with COBEC for the first time for the import of sizeable quantities of soyabean oil. Hitherto these purchases were made by the STC indirectly. The direct deal should result in imports being more economical.

Besides soyabean oil, white printing paper, other edible oils and wattle extract have been identified as the items which we can import from Brazil. India, it has been assessed, can export rice, chemicals, drugs, tiles, engineering products and finished leather to Brazil.

Understanding has been reached over the STC exploring the possibilities of using the warehousing facilities of COBEC in Brazil and other countries. It has been proposed that possibilities should also be explored for reducing the freight cost to India of imports of soyabean oil from Brazil through linking the outgoing liquid cargo from India with imports from Brazil. There are good prospects of using this mechanism in respect of exports of castor oil from here to destinations in the west.

The two organisations have further agreed to sponsor jointly market studies for items of interest to them. An important field to be taken up for such a study concerns footwear, leather garments and finished leather. It has been suggested that cooperation, production and marketing efforts can be undertaken by the two organisations to promote trade in third countries, particularly the United States.

The STC and COBEC have as well reached an understanding that they should consider promoting mutual use of consultancy services for third country projects. There is good scope for some joint ventures fructifying in the two countries themselves.

The trade and economic cooperation between India and Brazil has remained at a low ebb because of the long distance involved. But the two countries have been collaborating with each other to some extent in the global trade of some of their principal items such as coffee and castor oil.

Bihar : backward or forward ?

THOUGH THE chief minister of Bihar, Mr Ram Sundar Das, has succeeded in defeating the no-confidence motion against his ministry, it seems doubtful indeed if the state will be able to enjoy political stability in the coming months. The motion was sponsored jointly by the six opposition parties, including the CPI, the Congress (S), the CPI (M), the Indian Socialist Party, the Jharkhand Party and the Forward Bloc, but they could not win because of the unexpected support that the ministry got from the Congress(I). The ministry, therefore, is likely to remain undisturbed for some time more but recent developments have weakened it to such an extent that it will be unable to take bold decisions and implement them speedily and effectively.

Mr Das has said that he would reconstitute his ministry by the end of August or the beginning of September and he has assured adequate representation to all sections of the party. It remains to be seen how far he will be able to form a ministry in such a manner as to satisfy the various groups. In the past, the chief minister had difficulty in regard to the allocation of portfolios. This problem may come up again unless Mr Das asserts himself firmly and tactfully, and distributes them so as to facilitate the efficient handling of the different departments.

Mr Das has strongly criticised Mr Karpoori Thakur's attempts "to wreck the party". He has said that the real motive of the defectors has been to fight his ministry rather than communalism or authoritaranism. He has observed that "Mr Thakur's dreams to overthrow him from power have been shattered in the past and will be shattered in future".

But Bihar's politicians do not seem to realise that, in trying to wreck one party or the other, and shatter their opponent's dreams, it is, in fact, the state's economy that is being wrecked and shattered. Despite its immense natural and human resources, Bihar continues to be backward with a per capita income which is far below the all-India average. Nearly 66 per cent of the state's population is estimated to live below the poverty-line. The fact that the per capita consumption of electricity is only 85.25 kwh against the all-India average of 118.8 kwh and that only about 30 per cent of the villages have been electrified compared to the national average of 38 per cent shows glaringly how backward Bihar continues to be, despite the implementation of five five-year Plans. But these facts and figures do not seem to bother Bihar's politicians who relentlessly intrigue against any ministry which is not to their liking.

It will, indeed, be surprising if the political instability has not produced its inevitable impact on the state's administration. It is true that in many other states also the administrative machinery has become sloth, corrupt and indisciplined, but in Bihar the rot seems to have gone too far. Consider, for instance, what Bihar's chief secretary, Mr K. A. Ramasubramaniam, wrote in the *Economic Times* of June 13, 1979: "Administrative inefficiency is admittedly a major reason for our poor performance on the development front. The processing of Plan files in the secretariat is tardy and implementation even tardier. There is overstaffing in the secretariat and the secretariat has been con-

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Vol 73 No. 6 August 10, 1979
Price Rs 2.50

IN THE NATION 257-263
Farm Output Prospects
FERA Issues Boom
Impact of Imports
Indo-Brazilian Cooperation
Bihar : Backward or Forward ?
Karnataka on the Move Again
Training Rural Youth

WINDOW ON THE WORLD 264-268
The Lusaka Meet
Oil : Uneasy Balance Predicted
BNOC's Changed Role
Thailand Invites Investors
Reconstruction in Nicaragua
Ethiopian Sea-Saw

COVER FEATURE 270
Focus on Agro-chemicals

POINT OF VIEW
Foreign Aid : Effect on National Economy—*Navin Chandra Joshi* 283
Desai's Defeat Diagnosed —*Kerala Varma* 285
Growth Rate of Groundnut in Andhra Pradesh—*Meenakshi Bai* and *G. H. Sankara Reddi* 287
BOOKS BRIEFLY
Problems of Regionalism —*Academicus*
Books Received 295
TRADE WINDS 296
COMPANY AFFAIRS 299
COMPANY MEETINGS
The Britannia Biscuit Co. Ltd 302
Rajasthan Financial Corporation 304
RECORDS & STATISTICS 306
Pharmaceutical Industry : Key Statistics

verted into a debating society. Officers are reluctant to meet, discuss and hammer out differences and every one seems to think that his cleverness would be judged only by the number of objections/queries he raises to any proposal coming before him. The length of some notes only matches their irrelevance". The chief secretary added that attempts to reform the administration were meeting with resistance. He pointed out that "there is complete indiscipline in the lower ranks who are more busy in airing their grievances".

In this situation, in whichever way Mr Das reconstitutes his ministry, one wonders how far it will be able really to govern and tackle the problems of poverty and unemployment which have been chronically persisting in the state and are actually getting aggravated.

Karnataka on the move again

THE COMMISSIONING of the first unit of 135 MW of the Kalinadhi project in Karnataka, after the date has been shifted many times in the past 2½ years, marks another major landmark in the history of hydel power generation in the state. Somehow the potential of over 5,000 MW in Karnataka is being slowly harnessed and the HT and LT consumers in the region have been obliged to endure curbs on power consumption since 1972 and utilise only partly the installed capacity of the industrial units. When the mammoth Sharavathi project came into being in the sixties, the Karnataka Electricity Board was totally unprepared for handling the large blocks of power generated at this centre. Because of the inadequacy of transmission and distribution facilities within the region, Tamil Nadu was getting the advantage of Sharavathi power. The timely interlinking of the state grids proved to be highly advantageous in securing cheap hydel power from this project.

The shortcomings in distribution facilities were rectified within three years and even with the commissioning of 10 units, of 89.1 MW capacity each and generation of over 4,800 million units from all sources, the power needs of the state could not be fully met. The export of power to Tamil Nadu under compelling circumstances gave rise to the misleading impression that Sharavathi power itself could serve the requirements of all classes of consumers for several years. The booming industrial activity that followed between 1967 and 1975 has been such that energy consumption can be easily 10,000 million units annually if all the needs are met. The generation from the state's sources is not more than 5,000 million units under the best of circumstances and the dominant role of the Sharavathi project will be evident from the fact that its energy potential is as much as 4,400 million units, out of a total generation of 5,000 million units and vagaries of monsoon affecting the rate of filling the Linganamaki reservoir have seriously affected total availability. The supply of power by Kerala since last year and the improvement in Tamil Nadu have been helpful in augmenting the availability. With the completion of work on two generating sets of 27.5 MW each for using tailrace waters of Sharavathi and the commissioning of first units of Kalinadhi project, a new phase of increasing supply has begun.

commendable work

The Kalinadhi project is bigger in conception and even more difficult of execution than the Sharavathi project. The Mysore Power Corporation, the autonomous organisation constituted for undertaking the sole responsibility for power generation in the state, has been doing commendable work in the past few years. In the earlier stages, there were serious constraints relating to the availability of financial resources. Many difficult problems regarding geological conditions and dam construction had to be solved and only after 1975 construction work gethered momentum. The initial effort dates back to 1972. A period of seven years is probably too long even taking into account the peculiar problems posed by the difficult terrain and the necessity to restrict working during the non-monsoon period. But the period of construction could have been reduced by at least 18 months, if not two years, had the central and state governments realised the importance of the scheme and the scope for securing cheap hydel power on a continuing basis. At it has happened, over 10,000 million units of power have been 'lost' due to the delay of two years. What is more, without the completion of the Supa dam, which will have the stabilising reservoir, the set now commissioned and the others going on stream can operate on the run of the river basis. There will necessarily be heavy generation during periods when the river is in floods and considerably lower generation in the off-season. The operations of the state grid, therefore, have to be coordinated suitably.

Kalinadhi project

In the first stage of the Kalinadhi project, six generating sets of 135 MW each will be located in the Nagjhari power house and two units of 50 MW each in the Supa dam. This dam will be ready only in 1983. Till then the full potential of 4,100 million units cannot be realised. It is, therefore, highly important to adhere strictly to the schedule for completing the construction of the Supa dam and even shortening the period as the full benefit will accrue only when all the eight units can be effectively operated. The second stage of the project also should be implemented without delay as aggregate capacity is 1,300 MW and the same difficulties will not be experienced in implementing this scheme.

The six units in the Nagjhari power house are scheduled to be in operation at intervals of six months. It is, therefore, to be expected that there will be an increase in power generation within the state by over 1,000 million units annually in the next four years. The programme for the augmentation of the Linganamakki reservoir of the Sharavathi project is also likely to be completed in a short period. Karnataka, therefore, is again on the move and there may be a fresh filip to industrial activity. But the deficit in power supply will remain with rising demand. As only 50 per cent of the hydel potential is being exploited, work on other projects such as Varahi and Gangavalli will have to be accelerated.

In the context of increasing cost of coal for thermal generation and prohibitive prices of petroleum products, maximum attention has to be paid on the development of hydel resources. There should be no excuse for let-up in the execution of new projects on the plea of inadequacy of financial resources or disputes over what should be the size, character or location of inter-state projects like the Hogenekal on the Cauvery.

The attractiveness of hydel power generation will be recognised if it is pointed out that even with an inflation in cost, the outlay will be only Rs 230 crores in the first stage. Even assuming that there will be an increase in the outlay before completion due to unexpected increases in the cost of construction, the investment for a killowatt of capacity will not be more than Rs 3,000 against Rs 5,000 in Tamil Nadu for a new project and other regions. The remaining hydel potential of over 5,000 MW in Karnataka, Andhra Pradesh and Kerala should, therefore, be expeditiously exploited by the state's concerned jointly and severally.

Training rural youth

A COMPREHENSIVE programme has been drawn up by the government of India for training the rural youth for self-employment with a view to fostering rural development and mitigating the rigours of unemployment in the countryside. At least two lakh rural youth will be trained annually under this scheme—known as the National Scheme of Training Rural Youth for Self-employment (TRYSEM)—in agricultural and allied activities. During the current year, 2,600 blocks throughout the country will be covered by the integrated rural development programme, following the addition of 300 blocks to the last year's 2,300. Evey block, thus, will have a minimum of 40 persons on an average to be trained under the TRYSEM.

The main thrust of the scheme will be on equipping the rural youth with the necessary skills and technology to enable them to seek self-employment. The capacities available in the existing training institutes are proposed to be fully utilised and even suitably augmented, wherever necessary. The training courses will have a practical bias based on the concept of learning by doing and would be fully integrated with the various ongoing schemes of rural development. After training, the trainees will be provided appropriate support by the government for setting up their own enterprises.

Training under the TRYSEM will be imparted in selected trades and areas of activities covering not only the agricultural and allied sectors but also the small industries and service sectors. The states have been asked to take up detailed exercises as to the actual training needs of each district based on the local resources and potential for development in different fields and activity.

economic viability

The economic viability of the enterprises recommended will have to be carefully assessed. Such training institutions as the Gram Sevak Training Centres, the Gram Sevika Training Centres, Farmers' Training Centres, Krishi Vigyan Kendras, agricultural and other universities, industrial training institutes and other similar state and central organisations will be pressed into service: Suitable voluntary organisations will also be included in the programme. The training courses, curricula and syllebi are proposed to be designed in consultation with the institutions concerned.

The identification of trainees is envisaged to be done as a part of block level planning effort for the betterment of the lot of the vulnerable groups. The selection would, therefore, be restricted to some target groups of small and marginal farmers, landless agricultural labourers, artisans and craftsmen and people below the poverty-line. Initially only one trainee will be selected from each family. Preference is to be given to the members of the scheduled castes and scheduled tribes and women in these selections. No minimum educational qualifications are to be insisted upon.

The training institutions and organisations for credit, marketing and other services will be involved in the programme from the very beginning. Projects for self-employment will be prepared in advance and all the inputs required including the permissible subsidies and loans from institutions will be clearly spelt out and arranged expeditiously. Close contact will be maintained by the training institutions/trainers with the trainees even after they have completed their training with a view to assessing their performance or ascertaining their problems, if any. Necessary information support would be provided to the trainers in order to keep them abreast of the technical developments, other facts about raw materials, marketing, etc. A monitoring system will be evolved so as to follow up the progress of each trainee.

The scheme is in the central plan sector and will be operated by the Department of Rural Development. The trainees will be sanctioned a stipend up to Rs 100 per month for the period of training. Besides, training expenses not exceeding Rs 50 per month per trainee could be incurred which would be made available to the training institutions concerned for meeting the expenditure on honoraria, training courses, materials and other institutional expenses. The trainees will also be eligible for financial assistance under the IRD pattern. The expenditure on training and the subsidy component of the scheme will be shared equally by the central and the state governments, both in the IRD and non-IRD areas. There will not be any difference among the trainees from the IRD and the non-IRD areas. They will be treated on an equal footing for all purposes.

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Window on the world

The Lusaka meet

THE SEVEN-DAY Commonwealth summit at Lusaka ended on August 7 in an atmosphere of optimism after having arrived at an acceptable plan for a final solution to the long-standing Rhodesian problem. The dramatic breakthrough on this thorny issue was possible because of the realistic attitude adoptod both by the British prime minister, Mrs Margaret Thatcher, and Tanzania's president, Mr Julius Nyerere. While Mrs Thatcher, whose country has still the legal authority in Zimbabwe Rhodesia, hoped to send out invitations for a constitutional conference, the Tanzanian leader, who had insisted on the recognition of the Patriotic Front as the sole representative of Rhodesia, assured the Commonwealth summit that the Front would not be a stumbling block to the new initiative.

The draft accepted by the summit observed that certain developments since their meeting in London in 1977 had added new dimensions to the Zimbabwe Rhodesia issue, but the potential dangers inherent in the existing situation remained. They confirmed that they were wholly committed to genuine black majority rule for the people of Zimbabwe and considered the constitution which resulted in Bishop Abel Muzorewa coming to power as defective in certain important respects. The constitutional responsibility of the British government to grant legal independence to Zimbabwe was stressed on the basis of majority rule and the search for a lasting settlement that would involve all parties to the conflict.

The independence on the basis majority rule required the adoption of a democratic constitution, including appropriate safeguards for minorities. The government formed under such a constitution must be chosen through free and fair elections, properly supervised under British government authority and with Commonwealth observers. It was also accepted that it must be a major objective to bring about a cessation of hostilities and an end to sanctions as a part of the process of implementation of a lasting settlement.

Mr S. N. Mishra, the minister for External Affairs and the leader of Indian delegation, urged that the framework of agreement on Zimbabwe reached at the Commonwealth summit should be implemented with a sense of urgency. "I would give no more than three months to get it under way," he told the conference. Mr Mishra also reiterated India's policy of implaccable opposition to all manifestations of colonialism and rascism in Afrcia. "We have sought to translate our deep seated political convictions into response and contribution through programme of support for and cooperation with the frontline states and liberation movements," he added. "My government is determined to continue such moral, meterial, political and diplomatic support in this principled struggle against racism and true democracy for southern African liberation movements," he stressed.

While Mrs Thatcher proposed to call an all-parties meeting on Rhodesia in which the Patriotic Front leaders would participate, Tory backbenchers and orthodox partymen in Britain were raising the cry of "a sell-out in Lusaka" and expressed concern that promised trouble, bordering possibly on a revolt in the party, when the prime minister returned from the Commonwealth conference.

The cry of "a sell-out" was being raised in spite of the fact that Mrs Thatcher did only what she made clear she would do. She had indicated in a statement before coming to Lusaka that her government intended to endeavour for, first, an all parties conference on Rhodesia in which Mr Joshua Nkomo and Mr Robert Mugabe would also participate, and, second, changes in the constitution that would remove the veto power of the white minority in the legislature and give the black majority real control of the security forces, the civil service and the judiciary.

Having successfully tackled the Zimbabwe Rhodesia issue, the Commonwealth heads of government debated various other issues such as Vietnam refugees, west Asia and the world economic scene, with many speakers highlighting the plight of the developing non-oil producing countries. The Sri Lanka prime minister, Mr Premadasa, mentioned, for instance, that in 1970 his country was spending only 3 per cent of its total export earnings on oil imports. This year 31 per cent of this revenue was being spent for its essential oil needs. Mr Premadasa stressed the urgent need to set up the long talked about commodity stabilization fund particularly in view of the wild fluctuations in commodity prices and the dependence of many developing nations on their commodity export earnings.

Mr S.N. Mishra called for an integrated Commonwealth approach to develop alternate energy sources. He cited the existing cooperation between Australia and India in this field and indicated that India would like to integrate its research with that country's. Mr Clyde Sanger, the spokesman for the Commonwealth secretariat, said so far as he knew, this was the first time that a senior Indian minister had come forward with a proposal for integration of research into alternate energy sources with Australia. Several other speakers also stressed the need for urgent and concerted attempts to tap alternate sources of energy. Many supported the Jamaican premier, Mr Michael Manlay's proposal for setting up an international energy authority.

Oil: uneasy balance predicted

THE US Energy department sources expect the world oil supply outlook to remain grim this year. It can get even worse next year, unless a severe recession cuts demand to an extent greater than is expected.

The total non-communist world consumption, it is assessed, will probably go up this year by only one per cent, although the developing countries may show a much larger percentage increase in use—over fourper cent. Most of that increase will be from the more developed developing countries, including Mexico and the OPEC nations themselves,

Europe is expected to increase its consumption by 2.5 per cent. Japan and Australia are likely to remain level with the 1978 consumption totals. Only the United States is envisaged to show a drop in consumption by about three per cent.

The overall non-communist oil consumption this year may total 50.8 million barrels a day, compared to total supplies of 51.5 million barrels. This should help in rebuilding stocks to the last year's pre-Iranian averages, though not to the higher 1977 level.

low inventories

In 1980, the consumption of the non-communist world might grow to 52.0 million barrels a day, while supplies hold steady at 51.5 million basrels. The OPEC supplies are expected to decline slightly, but Mexico and North Sea production is anticipated to increase. This would mean that inventories could be "dangerously low" by the end 1980, of especially for distillates.

The accuracy of the estimates for 1980, it is however pointed out, will depend heavily on the severity of the projected economic downturn. The projection assumes an average two per cent economic growth in industrialised nations. Should a serious recession develop, oil demand, it is felt, would get reduced sharply to levels below those of 1978. But any appearance of a supply surplus would be temporary and illusory.

As for prices, "continued pressure" is predicted through 1980, although spot prices for gasoline and distillates have dropped from their late spring peaks. Spot crude prices could also "soften somewhat" until the winter heating season begins. Increased European demand for distillates for heating could drive spot prices up again in late summer. But at the same time, pressure on gasoline prices should ease as the summer driving season ends.

A US State department study has revealed that the 60 per cent increase in world oil prices by the OPEC since December will have varying degrees of negative impact on the non-oil-exporting less developed countries (LDCs) over the next year and a half.

The study assumes that the average price of a barrel of oil will be about $18 in 1979 and almost $22 in 1980. Based on these assumptions—together with the expectation that there will be less demand in the industrialised nations for non-fuel exports of the LDCs and less demand in the LDCs for non-fuel exports of the industrialised nations, because of the higher oil price—the study estimates that real growth in the non-oil-exporting developing countries as a group will decline from an annual rate of 5.1 per cent to 4.1 per cent in 1979, and that their overall trade deficit will increase by $ 9,700 million—from$27,800 million to $37,500 million.

In 1980, the study shows, real growth in the non-oil LDCs will decline by an additional three-tenths of a percentage point—from 5.5 per cent to 5.2 per cent—while their combined trade deficit will rise by an additional $14,800 million—from$28,400 million to 43,200 million.

"In other words," the study maintains, "the LDCs are incurring a combined trade deficit during the two years which is higher by $24,500 million than it would have been had oil prices increased only at the same rate as world inflation."

LDC's deficit

This increase in the LDC trade deficit is almost equal to the concurrent increase in the value of their fuel imports, which are expected to rise from $52,300 million to $64,100 million in 1979—the remainder being accounted for by a decline in non-fuel imports.

The state department sources estimate that the overall fuel import bill of the non-oil LDCs will reach $76,100 million by the end of 1980.

A regional breakdown of the economic impact of higher OPEC oil prices is even more revealing. Excluding certain non-oil LDCs in west Asia—such as Jordan, Syria, Egypt—for which adequate data are lacking, the US State department study shows that:

—The real growth in the African non-oil LDCs will drop sharply in 1979 from 4.1 per cent to 2.5 per cent: concurrently, their trade deficit as a group will rise from $8,190 million to $11,400 million. In 1980, the real growth will decline modestly from 3.9 per cent to 3.5 per cent, while their combined trade deficit will increase to $12,930 million.

—The Asian non-oil LDCs also will

experience a decline in real growth during 1979 from 6.2 per cent to 5.4 per cent, while their combined trade deficit will increase from $9,100 million to $11,300 million. The real growth in 1980 will fall from 6.4 per cent to six per cent and the region's trade deficit will rise from $8,600 million to $13,700 million.

—The real growth in the Latin American non-oil LDCs will decline from 3.8 per cent to 2.6 per cent in 1979; their trade deficit will increase from $6,100 million to $8,480 million this year. In 1980, the real growth will fall from 4.7 per cent to 4.3 per cent, while the region's trade deficit will rise from $5,000 million to $8,400 million.

The study concludes that the size of each region's trade deficit in relation to its economic output varies inversely with the region's per capita income. Thus, Africa, which has the highest deficit in relation to its economic size, also has the lowest per capita income, followed in order by Latin America and Asia. The study notes that "the lower the per capita income of a region, the lower that region's ability to secure private financing" to offset the higher oil prices.

BNOC's changed role

As a part of its changed industrial policy, the new conservative government in Britain has proposed to change the status of British National Oil Corporation (BNOC). The corporation is to be given a "much more limited role," Mr David Howell, Energy secretary, told the Commons recently. Some of its North Sea assets are to be sold and its exploration commitments reduced. It will no longer have preferential treatment when licences are awarded and it will cease to have a statutory role as government adviser. It will give up its seat on all the North Sea operating committees other than those in which it has an equity interest. Moreover, the government is to consider means of injecting private capital into the corporation's offshore activities. Mr Howell added that it was the government's belief that the offshore assets should be more widely owned.

On the other hand, the corporation's large and growing oil trading interests are to remain firmly in state hands. It will continue to handle all the crude oil provided in lieu of royalty payments, sold under participation agreements or gained through its development activities. The BNOC has emerged as one of the world's leading oil traders. Its sales are running at £300 million a month. Last month it was instrumental in the pricing or disposal of one million barrels a day, the equivalent of about half the oil consumed in the UK.

Lord Kearton, chairman of the corporation, has pointed out that the plans ensured that the corporation would have a continuing and important role to play. Dr David Owen, opposition energy spokesman, however, attacked the proposal. Oil, he said, was a "vital, national and strategic resource." Far from reassuring the industry and causing more stability, the statement on disposing of assets and introducing private capital posed far more questions than it answered, he stressed.

In the next few months, the government has to clarify a number of points in its package, including the extent to which some of BNOC's one billion pounds worth of assets will be sold off and to what degree public funds will be injected into BNOC offshore exploration and development. Two other aspects of offshore policy still to be tackled are depletion rates and development of marginal fields. The government has to decide how fast it wants North Sea reserves exploited. It could deliberately speed up the development pace to give a sharp boost to the economy. Or it might take the view that the oil in the ground can only increase in value and therefore it would be in the country's long term interest to match output to domestic needs and restrict net exports as far as possible.

The British government has also scrapped the Energy Commission, set up in 1977 to advise and assist the Energy secretary. The commission met four times under the chairmanship of Mr Anthony Wedgwood Benn, formerly Energy secretary—the last time in December 1978—and published 24 papers on the various aspects of energy policy. Mr David Howell, Energy secretary, in a statement formally disbanding the commission, said: "While I intend to consult widely in the formulation of energy strategy and on energy matters generally, I do not believe the Energy Commission is the most effective way of achieving this consultation". Mr Howell promised closer involvement of parliament through the new select committee on Energy.

Thailand invites investors

The Board of Investment, which is Thailand's central investment planning authority with wide discretionary powers to promote both foreign and domestic investment, has recently come out with a 26-point package of incentives to lure foreign capital. The board tries to encourage and regulate foreign and domestic investment in the most profitable areas of the Thai economy which involves the defining of priority areas for foreign investment, providing investment services, vetting potential investors and identifying the industries which shall enjoy promotional status. Though the board is not involved in the capitalisation or financing of foreign investment programmes, often it helps foreign investors to locate reputable local partners.

The target areas of foreign investment in Thailand currently are ago-industries, labour-intensive industries and export-oriented industries. Within the framework, opportunities are available in the following fields: agro products and commodities, minerals, metals, ceramics, chemicals and chemical products, mechanical and electrical equipment and service industries.

Under its major discretionary power of granting promotional investment privileges, the board has offered the following incentives and tax concessions:

General Incentives: The board offers guarantees against nationalisation, competition of new state enterprises, monopolisation of sales of products, price control, permission to export and import by government agencies or state enterprises with exempted taxes.

Protection measures have been offered in the form of imposition of a surcharge on foreign products at a rate not exceeding 50 per cent of the CIF value for a period not longer than one year at a time and import ban on competitive products. The chairman is empowered to order any assistance action or tax relief measures to be adopted for the benefit of the promoted projects.

The board allows bringing in of foreign nationals for undertaking investment feasibility studies, foreign technicians and experts to work in promoted projects, ownership of land for carrying out promoted activities and remittances of foreign currency.

tax incentives

Tax incentives have also been offered. These include 50 per cent exemption from import duties and business taxes on imported machinery; up to 90 per cent reduction at a time for a year in import duties and business taxes on imported raw materials and components; exemption from corporate income-tax for three to eight years; carrying forward and deduction as expenses up to five years of any losses incurred; exemption of up to five years on withholding tax on goodwill, royalties or fees remitted abroad; and exclusion of dividend derived from the promoted enterprises from taxable income during the income-tax holiday.

Some additional special incentives are provided for enterprises in the investment promotion zones. These include a maximum reduction of 90 per cent of business tax on the sales of products for a period up to five years; a reduction of 50 per cent of corporate income-tax for five years after the termination of normal income-tax holiday or from the date of income earning; allowance to double the cost of transportation, electricity and water supply for deduction from the corporate taxable income; allowance to deduct from the corporate taxable income up to 25 per cent of the investment in the costs of installing infrastructural facilities for 10 years from the date of income earning.

For export enterprises, exemption is granted from import duties and business taxes on imported raw materials and components as well as on re-export items. Allowance is provided for deducting from the corporate taxable income the amount equivalent to five per cent of an increase in income derived from export over the previous year, excluding costs of insurance and transportation.

Reconstruction in Nicaragua

MR MARIO Soares, the Portuguese socialist leader and former prime minister, proposes to head a mission of European and Latin American socialists to the new regime in Nicaragua. The move is aimed at demonstrating support for the social democratic component in the Sandinista government of Nicaragua and a willingness to assist it against any attack by extremists, either rightisis or leftists.

Apart from Mr Soares, the delegation is expected to include Herr Alwin Brueck, parliamentary state secretary at the West German ministry for Economic Cooperation and members of the socialist parties in Austria, France, the Nordic countries and El Salvador. The leaders of the Socialist International welcomed at a recent meeting outside Stockholm the Sandinista victory and decided upon the mission. The Spanish socialists have already sent a mission to Managua. There is concern among the parties represented that the Nicaragua government should not be obliged to depend on help from Cuba or other members of the Comecon bloc. The US has also agreed recently to continue full diplomatic relations and to begin discussions on aid to rebuild the country.

The Sandinista guerrillas, who have quickly moved to fill the power vacuum created by the collapse of president Somoza's National Guard, have been feeling the urgency of getting the ruined country back to normal. Nicaragua is planning to renegotiate its foreign debt and is seeking emergency financial help from the Inter-American Development Bank (IDB) and the International Development Association, the soft loans window of the World Bank.

Dr Arturo Cruz, the newly appointed president of Nicaragua's Central Bank, himself formerly a senior official of the IDB, has put the foreign debt at about $1.3 billion, of which one billion dollars is the public sector debt. Of the total debt, some $800 million are accounted for by private banks. The first priority for any new loans would be transport, housing, health and education.

The most challenging task we face now is to open the financial system and to ensure the public that their deposits are guaranteed, 'Dr Cruz has said. Nicaragua could count on $25 million in unconditional loans from the IMF but hopes that in the changed circumstances the IDA will make loans which in the past it had refused. With a per capita annual income of $770, Nicaragua has been disqualified from IDA loans.

Nicaragua's junta has nationalised local private banks, curbed the activities of foreign banks and announced that,

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Eastern Economist 30 Years Ago

AUGUST 12, 1949

Gladstone built up a great reputation for himself as a financier by the simple process of letting money 'fructify' in the pockets of the people. He was fortunate in his country and his environment. No modern Finance Minister can hope to get anything straight by the simple expedient of controlling as little as possible; and the reason is plain. Outside the United States of America, there does not exist today in any country the inexhaustible widow's cruse which undoubtedly did exist in England in Gladstone's day and later, and from which savings flowed out precisely to those points where they were automatically converted into investment with the greatest potentialities of producing further income. Not only is the quantum of savings inadequate; no one today, even in the United States, can be certain as Keynes equally undoubtedly was in 1936, that 'it is in determining the volume not the direction of actual employment that the existing system has broken down'. The long-term needs of the non-dollar world, and particularly of undeveloped areas, are in fact not only to create the necessary conditions for the flow of savings, but to direct the money saved, which is really manpower, where it is relatively better needed, and would make a better contribution to national life.

while it will honour all foreign debts, it wiil not repay $5.1 million to Argentina and Israel used by the former president Somoza to buy arms.

At its first press conference after taking over the junta stated that the government would buy the shares of the five private banks with government bonds bearing 6½ per cent annual interest rate and due for maturity in five years. The book value of the banks will be accounted in accordance with international practice.

The nationalisation was considered essential by the government to restore order to a chaotic and bankrupt banking system, bled by the seven-week war, and to restore international creditworthiness. The move was also designed to stop the heavy capital flight, estimated at $250 million which had taken place over the past two years.

The junta has also planned to establish a state-regulated mixed economy. It has been stressed, however, that nationalisation would not be indiscriminate. Private enterprise would be respected and foreign investment welcomed provided it complemented government development programmes.

Ethiopian sea-saw

The Ethiopian government forces were recently reported to have suffered one of their worst defeats in the 18-year counter-insurgency war in Eritrea at the hands of the Eritrean Popular Liberation Front (EPLF). The front claimed to have liquidated a 6,000-man force of three Ethiopian brigades in a surprise attack at Agat in the Sahel mountains. With this victory, the EPLF claimed to have effectively destroyed one of the three Ethiopian frontal assaults now in progress against their mountain base area in the north-eastern corner of this strategic Red Sea territory. The EPLF leaders also stated that they had captured 1,500 light weapons and large quantities of ammunition and equipment.

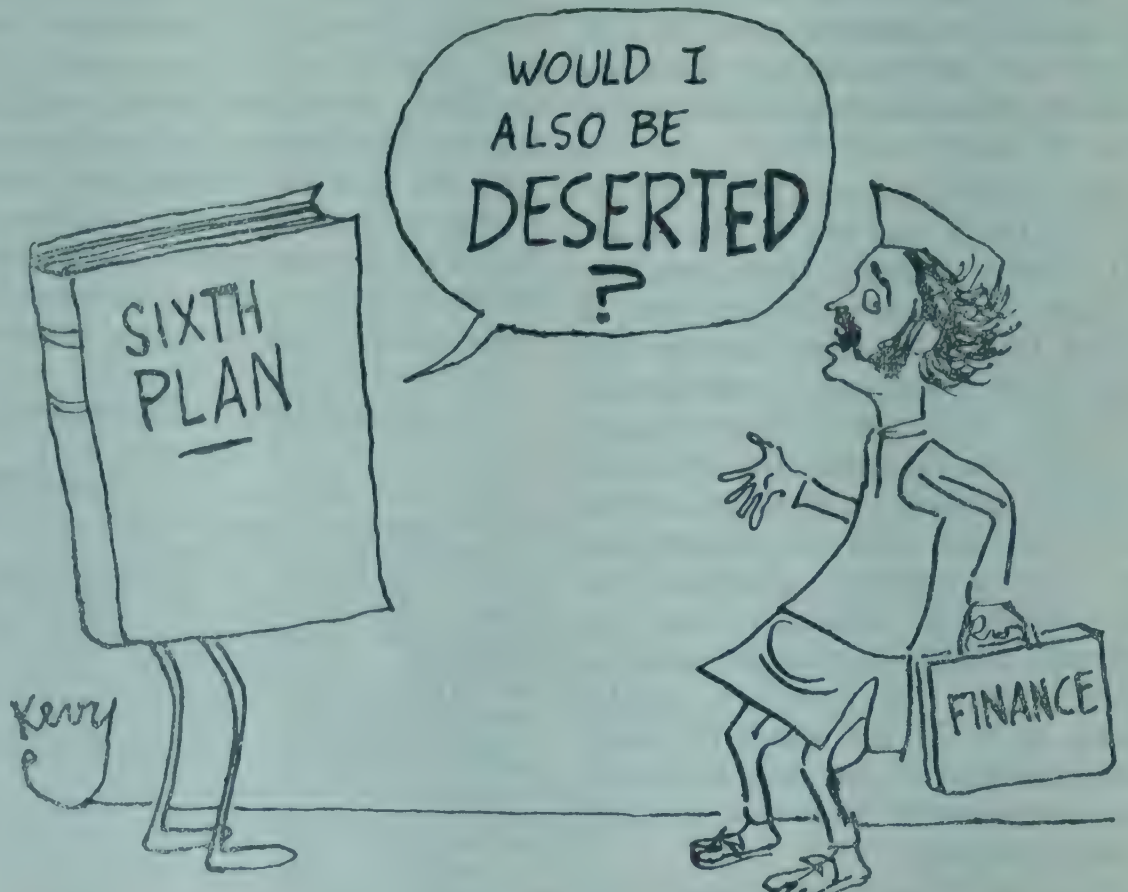
The battle is reported to have taken place in a narrow valley. The Ethiopian forces were attempting to drive through the valley on a road previously constructed by the EPLF from the coast towards the guerrilla-held town of Nakfa where a key battle of the current Ethiopian offensive was underway. Sporadic fighting also has been reported at Nakfa, supported by continuous bombardment by Mig jets, artillery and long-range ground-to-ground rockets. The EPLF also reported that a series of assaults had been turned back on a 25-mile front, with another attempted advance broken recently when 300 Ethiopian troops were killed.

confident of victory

Eritrean leaders were confidently forecasting victory against Ehiopian forces, after eight months of steady retreats from positions in the central highlands. It may be pointed out that eight months back Ethiopian troops had marched into the Eritrean town of Keren, which was a major advance in the Addis Ababa regime's efforts to bring the whole of Ethiopia back under government control, including the whole of the Red Sea region. Keren, a dusty, highland town which had about 40,000 inhabitants before the Ethiopians recaptured it, was the last major town held by the Eritrean Popular Liberation Front.

Earlier, the EPLF had taken Keren from the government forces in July, 1977, the climax of a military campaign which in the previous six months left the Addis Ababa government holding only the provincial capital, Asmara, the main port Massawa, and a few other settlements. With the loss of Keren, the EPLF had changed its strategy. It decided to evacuate bulk of its forces and supplies intact from towns and carried on the war from the mountains, unhampered by the need to defend static positions in towns. As the Ethiopian troops attempted to reoccupy increasing areas of the province, they became more vulnerable to guerrilla attacks than before. It would have taken a very large and effective counter-insurgency campaign to defeat the spread out EPLF.

The EPLF speaks now of carrying on "people's war" indefinitely and continues to receive outside support from the Arab states, notably Sriya and Iraq, which traditionally have backed it. The defeats that the Ethiopians had inflicted earlier do not seem to have weakened the marxist EPLF. For the moment, the EPLF is having a tide in its favour. But it is unlikely to matter with Ethiopia which sees less and less need to arrive at a compromise with the Eritreans.



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India's production and consumption of fertilisers was satisfactory in patches until the middle of seventies, but has shown noticeable improvement since 1976-77. The farming community, extremely alert about the input-output price ratios, has inevitably responded favourably to price reliefs resulting from successive tax concessions.

The fiscal policy in various manifestations, discussed in this feature by a special correspondent, has infused buoyancy in investment, production and consumption of fertilisers. Our two coal-based plants—the largest after South Africa —and four giant associated gas based units planned on the west coast demonstrate the rapid development envisaged for the industry.

However, the same cannot be said about the pesticides industry which, after an initial stirring, has lapsed into stagnation. As a matter of fact, pesticides industry sources complain of a step-motherly treatment in the matter of financial relief and promotional efforts so much evident in the case of the fertiliser industry.

These sources nevertheless hope that with a farmer prime minister and a pronounced rural bias in the government's policy, their case for relief will receive a more sympathetic consideration in the near future.

One of the immediate tasks confronting the government is to improve the low capacity utilisation level and the crippling operational efficiency of both the industries. The job need not be too difficult considering the rich and varied technical talent the country has.

THE CONSUMPTION of fertilizers in India nearly doubled in the mid-sixties with the introduction of high-yielding and fertiliser-responsive varieties of wheat, rice, maize, jowar and modernised agricultural practices associated with Intensive Agriculture Development Programme (IADP). The promotional endeavours received a further boost with the implementation of the recommendations of the Sivaraman commitee in 1966.

As a follow-up of this report, liberalised licensing policy attracted fresh investment. New areas of fertiliser consumption were identified and there was a steady increase in the number of dealer outlets.

The net result was that from the production level of only 85,000 tonnes in 1950-51, the capacity to produce nitrogen alone increased to 1.5 million tonnes in 1971-72 and three million tonnes in 1977-78. The phosphatic fertilisers manufacturing capacity also swelled from 63,500 tonnes in 1951-52 to half a million tonnes in 1971-72 and 1.08 million tonnes in 1977-78.

However, due to underutilisation of capacity, the production of nitrogenous and phosphatic fertilisers in 1977-78 was two million tonnes and 0.67 million tonnes, respectively. India does not have any source of potash.

The consumption of NPK complex fertilisers increased from 56,000 tonnes in 1950-51 to 294,000 tonnes in 1960-61 and 2.076 million tonnes in 1971-72. After a setback caused by high prices, the consumption again picked up following several excise reliefs to 4.286 million tonnes in 1977-78.

Certain conclusions which are useful in knowing the factors influencing the demand can be drawn from an analysis of the consumption pattern in the last two decades. The demand for NPK fertilisers increased by almost eight-fold, from 338,000 tonnes in 1961-62 to 1.1 million tonnes in 1966-67 and 2.66 million tonnes in 1971-72.

Agricultural scientists and extension agencies welcomed the trend not only because more fertilisers were used but also for the fact that for the first time the farmers showed awareness of the advantages of balanced application of all the three plant nutrients.

The consumption of nitrogen increased by seven times, while the application of phosphatic and potash fertilisers rose by 9 and 11 times during the above decade.

However, the favourable trend did

not last long. Rising prices owing to shortfall in domestic production and imports, aberrant weather, controls on distribution imposed by some of the states, the energy crisis, etc, led not only to a slump in consumption but distortions also once again surfaced in the balanced use of fertilisers. The downward trend was noticeable in 1972-73, 1973-74 and through the 1975 Kharif season.

The consumption of nitrogen fell from 1.839 million tonnes in 1972-73 to 1.829 million tonnes in 1973-74 and 1.766 million tonnes in 1974-75. The consumption of phosphatic and potash fertilisers during this period was as follows 581,000 tonnes and 347,000 tonnes; 650,000 tonnes and 360,000 tonnes; 471,000 tonnes and 336,000 tonnes, respectively (See Table I).

The consumption trend was reversed in 1975-76 and buoyancy in demand persisted through 1976-77 and 1977-78. However, lop-sidedness in the application of the three fertilisers—with nitrogen disproportionately monopolising the consumption—could not be corrected.

What is more distressing is that fertilisers are still beyond the reach of a large section of farmers?

In order to arrest the falling demand, the government reduced the prices of fertilisers twice in the second half of 1975. The combined consumption of NPK rose by 12.5 per cent to 2.894 million tonnes in 1975-76, but much of the consumption (2.149 million tonnes) was on account of nitrogenous fertiliser as it was the cheapest.

The consumption distortion in favour of nitrogen was sought to be corrected when the government reduced by 50 per cent the excise duty on superphosphate, and subsidised domestic production of phosphate in December, 1975. Three months later (March 1976) the pool price of potash was also reduced.

TABLE I

Nutrient-wise Consumption of Fertilisers and their Ratios 1972-73 to 1977-78

(Unit: thousand tonnes)

Nutrient	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	Exponential rate of growth/annum 1977-78 over 1972-73 (per cent)
N	1,839	1,829	1,766	2,149	2,457	2,913	+9.6
∓Change over previous year (per cent)	2.3	—0.6	—3.5	21.7	14.4	18.6	
P_2O_5	581	650	471	467	635	867	+8.3
∓Change over previous year (per cent)	4.1	11.9	—27.5	—0.8	36.1	36.5	
K_2O	347	360	336	278	319	506	+7.7
∓Change over previous year (per cent)	15.7	3.7	—6.7	—17.2	14.5	58.6	
Total	2,767	2,839	2,573	2,894	3,411	4,286	+9.1
∓Change over previous year (per cent)	4.2	2.6	—9.4	12.5	17.9	25.6	
Ratio $N:P_2O_5:K_2O$ ($K_2O=1$)	5.3:1.7	5.1:1.8	5.3:1.4	7.7:1.7	7.7:2.0	5.8:1.7	

Source: FAI

The consumption of phosphate and potash continued to fall. Besides, a study by the Fertiliser Association of India in 1975-76 showed that even among the districts with assured irrigation (109 districts representing 29 per cent of the total 380 districts in the country) there was a wide disparity in fertiliser consumption.

The FAI study revealed that more than 75 per cent of the total consumption in 109 districts was accounted for by 55 districts (50 per cent of the total). Conclusion: the potential fertiliser consumption even in the irrigated areas had not been fully exploited!

The government in cooperation with the states launched an Intensive Fertiliser Promotion Campaign (IFPC) in 1976-77. About 60 districts having assured irrigation were selected for fertiliser use.

The Agriculture ministry and the

Fertiliser departmant rightly concluded that without extensive and sustained promotional campaign, backed by extension support as provided under the IFPC, the uneven and lopsided fertiliser consumption pattern was bound to continue.

Hopefully, the NPK consumption recorded a sharp increase to 3.411 million tonnes in 1976-77; nitrogen, phosphate and potash consumption increased by 14.4 per cent, 36.1 per cent and 17.9 per cent, respectively. However, the level of phosphate and potash consumption still remained lower than recorded in 1973-74.

Once again tax relief greatly helped in lifting the sagging demand in 1976-77. The prices of urea were reduced by Rs 100 a tonne; a subsidy of Rs 1,250 a tonne was provided on indigenously produced phosphate and Rs 185 a tonne on MOP.

The other factors which brought about a sea-change in consumption were a good rainfall and an overall increase in the irrigated and cropped areas under the high-yield varieties of seeds. The IFPC districts especially showed a marked increase in consumption of nearly 40 per cent.

Favourable monsoons and evenly spread out rains; higher procurement prices for agricultural produce and lower fertiliser prices compared to the earlier years—ensuring a better input-output price ratio; larger areas being put under irrigation and HYV crops; availability, for the first time, of the right type of fertilisers and in time, etc—all these factors led to a record consumption level of 4.286 million tonnes in 1977-78.

TABLE II

Estimated Capacity, Production and Consumption of N and P_2O_5 for the Years 1979-80 to 1987-88

('000 tonnes)

Year & nutrient		Capacity	Production	Consumption	Gap
1979-80	N	4,782	2,980	3,779	—799
	P_2O_5	1,451	835	1,003	—228
1980-81	N	5,360	3,577	4,260	—683
	P_2O_5	1,451	959	1,172	—213
1981-82	N	5,360	3,972	4,772	—800
	P_2O_5	1,451	984	1,287	—303
1982-83	N	6,623	4,427	5,315	—888
	P_2O_5	1,533	1,014	1,407	—393
1983-84	N	7,272	5,558	5,890	—332
	P_2O_5	1,533	1,014	1,533	—519
1984-85	N	7,500	5,904	6,497	—593
	P_2O_5	1,608	1,029	1,664	—635
1985-86	N	7,500	5,983	7,135	—1,152
	P_2O_5	1,608	1,039	1,801	—762
1986-87	N	7,500	5,983	7,804	—1,821
	P_2O_5	1,608	1,049	1,943	—894
1987-88	N	7,500	5,983	8,505	—2,522
	P_2O_5	1,608	1,059	2,090	—1,031

Source: FAI

These favourable conditions continued in 1978-79. The estimates are that about 5.064 million tonnes of fertilisers were consumed in this year; nitrogen accounting for 3.418 million tonnes; phosphate 1.043 million tonnes and potash 603,000 tonnes — an increase of 17.3 per cent, 20.3 per cent and 19.2 per cent over the previous year, respectively.

The installation of a new government headed by a "farmer" prime minister has roused hopes that farmers will continue to receive remunerative prices for their produce and the prices of fertilisers may be further reduced in the near future. The 1979-80 budget has reduced the excise duty on all chemical fertilisers by 50 per cent. This has lowered the urea price by about Rs 100 a tonne.

It is well known that a farmer can be motivated to use more chemical fertilisers and other inputs if he is assured of a lower input price and higher output (produce) price. Hopefully, since 1977, fertilisers' demand has been on the upswing due to successive reductions in their prices. The buoyancy is likely to continue.

The demand for fertilisers by 1982-83 is expected to go up to about 5.3 million tonnes of nitrogen and 1.5 million tonnes of phosphate. (See Table II). Efforts are being made to finalise additional new schemes to augment fertiliser production capacity.

As a part of this programme, it is proposed to set up four large sized nitrogenous fertiliser projects, two each in Maharashtra (at Thal) and Gujarat (at Hazira), based on Bombay High/Bassein gas, and one in Assam, based on the gas available from the oilfields in the eastern region.

Techno-economic feasibility reports for the gas-based fertiliser projects in Maharashtra and Gujarat have already been received and are being processed for investment decisions.

While the two gas-based projects in Maharashtra would be implemented by the public sector Rashtriya Chemicals and Fertilisers Limited, the Gujarat projects would be implemented one each by the Indian Farmers Fertiliser Cooperative and National Fertilizers Limited —a cooperative enterprise and a public sector undertaking, respectively. The possibility of the two projects being entrusted to the IFFCO is not ruled out.

Besides the entire quantity of potash, about 35 per cent of the current requirements of phosphate and nitrogen fertilisers are met through imports.

Imports of nitrogen are mostly in the form of urea or NPK. However, the imports of phosphate are in the shape of rock phosphate and phosphoric acid.

With the development of the rock-phosphate deposits at Jamarkotra in Rajasthan, about a third of the country's requirements of rock-phosphate is supplied by Rajasthan.

The pyrite ore from Amjhore in Bihar is being utilised as a substitute for sulphur in the production of phosphoric acid. Amjhore pyrites have reduced phospheric acid imports by about 10 per cent.

The fertiliser industry has been included in the core sector. All the three sectors—public, private and cooperative have been assigned an important role.

The IFFCO which owns two plants (Kalol and Kandla), and one more each at Phulpur and Hazira under construction and planning stages, respectively, is Asia's largest cooperative enterprise.

The installation of a new government headed by a "farmer" prime minister has roused hopes that farmers will continue to receive remunerative prices for their produce and the prices of fertilisers may be further reduced in the near future.

Foreign equity participation is permitted in the fertilizer industry. So far, about half-a-dozen units have foreign equity participation up to 49 per cent.

The Fertiliser (Planning and Development) India Limited (FPDIL)—formerly known as P & D Division of the erstwhile Fertiliser Corporation of India—has emerged as a leading fertiliser consultancy agency in Asia. Besides the FPDIL, Engineers India Limited (EIL) and FACT Engineering and Design Organisation (FEDO) have acquired acknowledged capabilities in mechanical, electrical, instrumentation and civil works, procurement including inspection of machanery and equipment, erection and commissioning of plants.

However, these consultancy agencies are still dependent on foreign know-how in such critical areas as gassification, ammonia synthesis, etc.

A number of catalysts required for the production of fertilisers have been manufactured by these organisations; some of these are being exported.

Although foreign know-how will have to be relied upon in the case of the four gas-based west coast plants, FPDIL will be the prime contractor in designing, engineering and erection of these plants, the largest to be set up in India.

The development of Indian consultancy has helped in the reduction of the foreign exchange cost of a fertiliser plant from 60 per cent to about 35 per cent.

India appears to be fast moving to master the sophisticated process technology even in critical areas. When that happens, it will be possible to build a plant entirely on Indian know-how and capital equipment.

Following the discovery of crude and gas reserves in Bombay High and Bassein in 1974 and 1975, the feedstock policy has been revised. The government's new policy is that where gas is available, it should be the preferred feedstock. The second priority is coal. But switching to coal is dependent on the experience obtained from the operation of the two coal-based plants at Ramagundam and Talcher. These are likely to go on stream by the end of 1979. The government would first like to be satisfied that the coal gassification technology is viable. Thereafter, the use of gas and coal would be arranged on economic considerations, namely, area of consumption, logistics of transportation, viability, availability, etc.

As per the latest policy, the utilisation of fuel oil as feedstock would be excluded for all new fertiliser projects. The use of naphtha as feedstock for entirely new plants would be considered only in the case of a long-term disposal problem in an inland location.

Consideration would, however, be given to the use of naphtha as feedstock where existing plants at inland locations can be expanded at relatively lower capital cost and completed in quick time, the policy clarifies.

Another recent important policy decision relates to restructuring the public sector units. Based on regional and feedstock considerations, the Fertiliser Corporation of India and the National Fertilizers

Limited were split into four companies to run the following plants :

1. Fertilizer Corporation of India (FCI) : Sindri (including Modernisation and Rationalisation schemes), Gorakhpur, Talcher, Ramagundam and Korba.
2. National Fertilizers Limited (NFL) : Bhatinda, Panipat and Nangal.
3. Rashtriya Chemicals and Fertilizers Ltd. (RCFL) : Trombay and the new plants at Thal based on Bombay High gas.
4. Hindustan Fertilizer Corporation Limited (HFCL) : Namrup, Haldia, Barauni and Durgapur.

Many modern plants have been set up in the last 20 years to manufacture a wide range of fertilisers like SSP, TSP, urea, ammonium sulphate, CAN and various grades of complex fertilisers.

The production of nitrogen and phosphate during the decade 1961-62 to 1971-72 and in 1976-77 and 1977-78 has been of the following order :

TABLE III

Production of Fertilizers in India

('000 tonnes)

Year	N	P_2O_5
1961-62	154	65
1966-67	309	146
1971-72	949	290
1976-77	1857	478
1977-78	2000	670

Hower despite increased capacity and larger production the average capacity utilisation of the fertiliser plants, as Table IV prepared by FAI would indicate, has been only 61 per cent for nitrogen and 57 per cent for phosphate during the period 1973-74 and 1977-78.

Nevertheless, it is evident that, on the whole, the performance of the industry has not been too bad. During the above period the total capacity increased by about 60 per cent for nitrogen and hundred per cent for phosphate, but the production of both rose by nearly hundred per cent. Despite the low average capacity utilisation, the utilisation of capacity, as such, has however registered an increase from 55 per cent to 65 per cent for nitrogen, and from 61 per cent to 66 per cent for phosphate.

A farmer can be motivated to use more chemical fertiliser and other inputs if he is assured of a lower input price and higher output (produce) price. Hopefully, since 1977, fertilisers' demand has been on the upswing due to successive reductions in their prices. The buoyancy is likely to continue.

The most serious constraint on capacity utilisation has been frequent power interruptions the worst affected units being Nangal, CFL, Vizag, Barauni, etc. The government has approved a scheme to set up captive power units in all fertiliser plants.

The other constraints have been: ageing of the plants; labour indiscipline; teething technological problems emanating from faulty designs and equipment or both (examples: Durgapur, Cochin, Namrup Expansion and Barauni, and difficulties in getting timely supply of equipment and spares.

However, many of the units have done extremely well in capacity utilisation; some examples, IEL, Kanpur 98 per cent; Zuari, Goa 86 per cent; IFFCO, Kalol 95 per cent; and its Kandla unit 121 per cent.

In spite of a sizeable capacity underutilisation, the estimated production in 1978-79 increased by 15 per cent over the previous year to 2.3 million tonnes of nitrogen and 0.77 million tonnes of phosphate.

A large-scale modification programme for improving capacity utilisation of units in the public, private and cooperative sectors is under implementation. The International Development Agency (IDA) has provided a credit of $105 million for the modernisation programme.

In order to claim the advantage of retention price which would mean that the average capacity utilisation should not fall below 80 per cent, most manufacturers have been earnestly trying to improve the performance of their units. They are setting up captive power plants,

TABLE IV

Production and Capacity Utilisation of N and P_2O_5 1973-74 to 1977-78

Years	Installed capacity ('000 tonnes)		Production ('000 tonnes)		Percentage capacity utilisation	
	N	P_2O_5	N	P_2O_5	N	P_2O_5
1973-74	1,939	531	1,060	323	55	61
1974-75	2,196	592	1,185	327	60	58
1975-76	2,676	742	1,508	320	63	45
1976-77	3,064	1,042	1,857	478	64	56
1977-78	3,221	1,042	2,000	670	65	66

debottlenecking the units, and taken several steps—including changing feedstock (as in Nyveli and Nangal) —for ensuring higher efficiency and better maintenance of the machines.

At the beginning of 1978-79, 26 nitrogenous and complex fertiliser plants, six by-product ammonium sulphate plants, two TSP plants, 29 SSP plants and one perophos plant were in operation.

India's first fuel oil based plant, FCI—Nangal Expansion with an installed capacity of 152,000 tonnes of nitrogen a year and Trombay IV plants also started regular production in 1978-79, taking the total installed capacity to 3.255 million tonnes of nitrogen and 1.08 million tonnes of phosphate by the beginning of the current year.

In addition to the operating units, nine fertiliser projects are under various stage of implementation. Of these, Bhatinda, Panipat and Sindri modernisation projects are expected to start trial production by the end of the current year. The first two coal-based plants at Ramagundam and Talcher (daily capacity each plant: 900 tonnes of nitrogen) are also likely to be commissioned by the end of the year.

With the commissioning of the nine projects now under implementation and seven which are under planning (see Table V), India's fertiliser manufacturing capacity will increase to 6.929 million tonnes of nitrogen and 1.4 million tonnes of phosphate.

The government proposes to increase nitrogen capacity and production by two million tonnes every five years.

The attention just now is focussed on the World Bank aided four largest ever ammonia plants (capacity each: 1350 tonnes per day of nitrogen) which will be set up in the west coast and will be based on Bombay High/Bassein gas.

Two of these projects to be owned by the recently formed Rashtriya Chemicals and Fertilisers Limited

TABLE V

Plant-Wise Capacity of Nitrogen Based on Feedstocks

Name of Unit	Capacity ('000 tonnes)	Feedstock
I. Plants in Operation		
Public Sector		
1. Nangal	80	Electrolytic Hydrogen
2. Trombay	81	Naphtha
3. Gorakhpur	131	Naphtha
4. Durgapur	152	Naphtha
5. Udyogamandal	82	Naphtha
6. Cochin I	152	Naphtha
7. Madras	176	Naphtha
8. Barauni	152	Naphtha
9. Namrup	45	Natural Gas
10. Namrup Expansion	152	Natural Gas
11. Sindri	90	Coke/Naphtha
12. Neyveli	70	Lignite
13. Cochin II	40	Imported Ammonia
14. Rourkela	120	Coke Oven Gas/Naphtha
By products	20	
15. Nangal Expansion	152	Fuel Oil
16. Trombay IV	75	Natural Gas
Total	1,770	
Private Sector		
17. Ennore	16	Naphtha
18. Baroda	216	Naphtha/Natural Gas
19. Vizag	83	Naphtha
20. Kota	152	Naphtha
21. Kanpur	200	Naphtha
22. Goa	171	Naphtha
23. Tuticorin	258	Naphtha
24. Mangalore	160	Naphtha
25. Varanasi	10	Coke
By-products	4	
Total	1,270	
Cooperative Sector		
26. IFFCO	215	Natural Gas
Total	3,255	
II. Projects under Implementation		
Public Sector		
1. Bhatinda	235	Fuel Oil
2. Sindri Modernisation	129	Fuel Oil
3. Haldia	152	Fuel Oil
4. Panipat	235	Fuel Oil
5. Talcher	228	Coal
6. Ramgundam	228	Coal
7. Trombay V	130	Natural Gas
Total	1,337	
Private Sector		
8. GSFC Expansion (Broach)	273	Fuel Oil
Cooperative Sector		
9. Phulpur	228	Naphtha
Total	1,838	
III. Projects under Consideration		
1. Thal Vaishet I & II	686	Natural Gas
2. Namrup Expansion	152	Natural Gas
3. Kakinada	228	Fuel Oil
4. Hazira I&II	686	Natural Gas
5. Kanpur Expansion	100	Naphtha
Total	1,852	

Grand Total (I+II+III) 6.929 or 6.93 million tonnes

(**Source**: Ministry of Chemicals and Fertilisers)

(RCF), will be at Thal Vaishet (Maharashtra). The other two will in effect be twin plants of identical capacity, and will be located at Hazira (Gujarat). The cost of each plant is estimated at Rs 570 crores.

Based on 75 per cent capacity utilisation, the total nitrogen capacity which would be needed to meet the demand in 1982-83 has been estimated at seven million tonnes and additional capacity required for phosphatic fertiliser has been calculated at 0.9 million tonnes.

However, according to projections made by FAI (see Table II), there will be a continuing gap between consumption and domestic production of nitrogen and phosphate.

Improving production and productivity through better utilisation of existing capacity will considerably reduce the gaps in demand and imports.

The importance of optimum capacity utilisation has to be emphasised. The low level operation increases cost. On the other hand, a marginal five per cent increase in capacity utilisation is likely to result in additional production equivalent to a new 600 tonne ammonia plant.

Pesticides : a poor relation

INDIA BEGAN using pesticides in a big way to control malaria and fight locust menace in 1947-48. The entire requirements were then met through imports, mostly DDT and BHC formulations.

India's first BHC plant was set up in 1952 and the DDT unit three years latter. The National Malaria Eradication Programme in 1957 and the green revolution in mid-sixties brought about marked improvements in production and consumption of pesticides.

The annual growth in consumption in the first five-year Plan period was 3,750 tonnes. It shot up to 25,000 tonnes by the end of the second Plan. Between 1973-74 and 1974-75, the demand reached the peak level of 46,000 tonnes (indigenous production plus imports), inclusive of about 42,500 tonnes for agricultural operations.

However, thereafter, the graph remained stationary for a while and then took a plunge. The Table alongside reveals wide disparities between the targeted estimates and actual consumption of pesticides between 1974-75 and 1978-79.

The main factors contributing to the fall in demand are identified as high cost of pesticides and lower returns in terms of agricultural prices.

Another reason was near-eradication of malaria in the sixties; the disease had earlier caused about 500,000 deaths a year and disabled many thousands more.

The Working Group on Pesticides Industry for the sixth Plan period (1978-79—1982-83) attributed in its report the shortfall to unremunerative prices for agricultural produce like cotton which needs a high dose of pesticides, lack of "desired level of extension promotion work" time lag in the registration of an item, and phasing out of popular pesticides like Endrin and Texphone due to toxic reasons.

year	Target proposed (million hectares)	Pesticides required to achieve the target (tonnes)	Actual pesticides consumption (tonnes)
1974-75	64	40900	42530
1975-76	70	44500	42227
1976-77	78	49900	36713
1977-78	88	60000	39880
1978-79	100	80000	47800 (estimated)

Dr S. S. Chaddha, Techical Director, Pesticides Association of India, has expressed disappointment that although pesticides are as important as fertiliser, they have received altogether a different treatment in respect of tax relief.

An important factor contributing towards the development of the pesticides industry is the evolving of a self-reliant technology. Although India has adequate expertise for manufacturing conventional formulations, it is very much dependent on foreign technology for technical grade pesticides.

The import duty raised by 50 per cent in 1976 to 75 per cent had not been reduced. On the contrary, the excise duty in the current budget has been increased from 5 per cent to 8 per cent on intermediates/raw materials used in the pesticides industry falling under item 68 of the central excise tariff.

According to Dr Chaddha, high cost of pesticides has been a major constraint on pesticides consumption. Pesticides use, he says, is still at a very low level as compared to other advanced countries. Although pesticides are a very important input in agriculture, their use is economically beneficial only in areas where improved seeds, chemical fertilisers and irrigation facilities are already being made use of.

The use of pesticides, therefore, has not percolated to the poor farming communities with small agricultural holdings. The rate of consumption per hectare of cultivated land is very low. India uses approximately 336 g/ha of pesticides, as against 1,490 g/ha consumed in the USA and 10,790 g/ha in Japan.

This is one of the major factors that can account for low per hectare yields of food crops since the high-yielding varieties cannot exhibit their production potential in the absence of proper pest protection, says Dr Chaddha.

That production potential remains

suppressed for want of proper protection, can be exemplified by considering as to how in wheat, the crop which is resistant to pest attack, we have had a revolution, whereas in paddy, which is susceptible to pest attack, we have had no breakthrough as yet," Dr Chaddha stresses.

Following the Bureau of Industrial Costs and Prices (BICP) study into major pesticides (BHC, DDT, Malathion, Fenitrothion, Dimethoate, Phosphamidon, DDVP, 2-4-D, Zineb/Mineb and Zinc Phosphide), the ministry of Petroleum, Fertilisers and Chemicals asked the industry to reduce the prices of these pesticides. Prices of many of these pesticides have subsequently been reduced. But the impact on the consumption has been marginal.

The production of (technical grades) pesticides in the last four years (in tonnes) has been 1974-75: 34,167; 1975-76: 34,988; 1976-77: 35,811; 1977-78:42,634.

About 25 per cent gap in demand is met through imports; the quantity imported (in tonnes) has been: 1974-75: 16,583; 1975-76: 15,318; 1976-77: 6,106 and 1977-78: 11,745.

About 44 technical grade pesticides are being manufactured in India. These are made from indigenous and imported chemicals and intermediates. About 110 formulations are manufactured entirely using the Indian technology.

Considering the importance of the pesticides industry in public health and agricultural programmes, the government has accorded it a high priority for development by including it in the core sector of the industrial policy. To promote larger flow of capital and know-how (including foreign technology), the pesticides industry has also been included in appendix I of the Licensing Policy, 1973.

The provision encourages large industrial houses and multinational companies to invest in the industry However, by way of protecting the small-scale formulators, the manufacturers are required to make available about 50 per cent of technical materials to non-associated formulators. Similarly, 50 per cent of major imported technical grade pesticides are also allocated to formulators nominated by the state governments.

According to Dr. S.S. Chaddha, high cost of pesticides has been a major constraint on pesticides consumption. Pesticides use, he says, is still at a very low level as compared to other advanced countries. Although pesticides are very important input in agriculture, their use is economically beneficial only in areas where improved seeds, chemical fertilisers and irrigation facilities are already being made use of.

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Since 1974, the Agriculture ministry has taken upon itself the responsibility of directly distributing among non-associated formulators technical materials of important pesticides useful for agricultural operations. These are DDT, BHC, Malathion, Dimethoate, Fenitrothion, Parathion, Carbaryl and Endosulfan.

The estimated installed production capacity of techical grade pesticides is 74,718 tonnes. But the actual production in the last few years has been much below the capacity. The production in 1978-79, about 50,000 tonnes, indicates a capacity utilisation of nearly 67 per cent.

A number of licensed units—the total capacity sanctioned is estimated at 93,597 tonnes—have not commenced working due to stagnant demand and poor off-take, especially of products like Dithio-carbamates. Copper oxychloride, Thiocarbamates and 2-4-D.

The installed production capacity of formulations is much above the current production of technical materials. The total formulation capacity is estimated at 81,784 tonnes in the organised sector and 498,750 tonnes in the small-scale sector.

As there is a shortfall in technical materials, the formulation capacity is utilised to the extent of nearly 72 per cent in the organised and the small-scale sectors. Imports do not meet the gap adequately as there is a shortage of technical materials in the international market.

Barring Japan, India is the largest manufacturer of basic pesticidal chemicals in south Asia and Africa.

The following pesticides are produced indigenously:

Insecticides: Aluminium phosphide, BAC, DDT, Dichlorvos, Dimethoate, EDCT mixture, Ethylene dibromide, Fenitrothion, Lime sulphur, Lindane, Malathion, Methyl bromide, Nicotine sulphate, Oxydemeton-methyl, Parathion (methyl), Phosphamidon, Pyrethrum extract, Quinalphos, Monocrotophose.

Fungicides: Copper oxychloride, Cuprous oxide, Ferbam, Mancozeb, Nickel chloride, Organo mercurials, Sulphur colloidal, Streptocycline, Thiram, Ziram, Zineb.

Rodenticides; Coumafuryl, Warfarin, Zinc phosphide.

Mollusicicide: Metaldehyde

Nematocide: Metham N Sodium

Weedicides: Nitrofen, 2-4-D, Propanil

Plant Growth Regulants: Cycocel, Naphthalene acetic acid

Most of these pesticides are being manufactured in the organised sector.

The technology for the production

of new pesticides like Phenthoate and Endosulfan has been developed indigenously and commercial scale plants are being put up.

During the next five years, a number of important pesticides like Paraquat, Bavistin, etc. are expected to be produced indigenously.

There are 23 units manufacturing technical materials and 50 units producing formulations in the organised sector. There are about 350 units in the small-scale sector, mostly producing conventional formulations, mainly dust powders and to a limited extent—wettable powders and emulsifiable concentrates. The total installed formulation capacity of these units for various pesticides is estimated at about 500,000 tonnes.

The small-scale units are mainly concentrated in Andhra Pradesh, Gujarat, Tamil Nadu and Maharashtra.

The two state-owned units Hindustan Insecticides Limited (HIL) and Hindustan Organic Chemicals Limited (HOC) have been engaged in pesticides production since 1954 and 1969, respectively.

While HIL's units in Delhi and Udyogamandal (Kerala) are manufacturing DDT and BHC, its Rasayani factory in Maharashtra manufactures the lone pesticide BHC. Some units are also coming up in the state and joint sectors.

The HIL produced 4,177 tonnes of DDT and 1,526 tonnes of BHC in 1977-78. The Udyogamandal plant work under serious proudction constraints like non-availability of chlorine, power interruptions and labour indiscipline in the last financial year (1978-79).

The HIL has launched a diversification scheme. Its third unit at Rasayani in Maharashtra, will produce Malathion and its formulations (capacity 1,800 tonnes; likely date of commissioning of the plant is January 1980); DDT and its formulations (5000 tonnes: March 1980),

TABLE

Production Capacities of

(As on 30th

(In metric tonnes)

S. No.	Names of Pesticide	Licenced Capacity	Installed Capacity	Letter of Intents Issued
1.	BHC	40,900	37,900	11,940
2.	Carbaryl	7000	5000	—
3.	DDT	4200	4200	5000
4.	Endosulfan	4000	—	—
5.	DDVP	276	276	50
6.	Phosalone	1000	—	—
7.	Lindane	100	100	400
8.	Dimethoate	1250	1000	650
9.	Fenitrothion	1000	600	600
10.	Malathion	6500	2650	3000
11.	Methyldemton	325	250	—
12.	Phorate	450	—	600
13.	Monocrotophos	300	—	1450
14.	Parathion	1700	1700	—
15.	Phosphamidon	636	636	200
16.	Quinalphos	700	700	800
17.	Phenthoate	600	600	—
18.	Thanite	150	150	—
19.	Formothion	—	—	300
20.	Nicotine Sulphate	40	40	—
21.	Tetradifon	—	18	15
22.	Ethion	—	—	200
23.	Diazionan	—	—	350
24.	Thiometon	—	—	100
25.	Temephos	25	—	—
26.	Pyrethrum Insecticides	1200	—	—
27.	Fenthion	—	—	200
28.	Copper Oxychloride	2820	3420	—
29.	Copper Sulphate	3000	3000	—
30.	Nickel Chloride	300	300	—

VI

Pesticides in India

June, 1978)

		(In metric tonnes)		
S. No.	Name of Pesticide	Licensed Capacity	Installed Capacity	Letters of Intents Issued
31.	Organo Mercurials	117	120	—
32.	Zineb	2650	2650	—
33.	Thiram	400	400	—
34.	Ziram	634	634	—
35.	Ferbam	25	25	—
36.	Metham Sodium	25	25	—
37.	Carbendazim	535	135	—
38.	Sulphur (micronised/ colloidal/wettable)	2050	2040	—
39.	Carboxin	—	—	—
39.	(a) Warfain	100	100	190
40.	Fumarin	50	50	—
41.	Zinc Phosphide	966	516	—
42.	2,4-D	2575	2235	—
43.	Dalapon	550	—	50
44.	Paraquat	500	—	—
45.	TCA	50	—	—
46.	MCPA	100	—	—
47.	MCPB	50	—	—
48.	Propanil	1500	1500	—
49.	Fluchloralin	200	—	—
50.	Diuron	200	—	100
51.	Alpha Naphthyl Acetic Acid	20	10	—
52.	Chlormequat Chloride	200	100	100
53.	Aluminium Phosphide	1180	1180	—
54.	Ethylene Dibromide	258	258	—
55.	Methyl Bromide	300	300	—
	Grand Total	93,597	74,718	26,205

Source: DGTD

and BHC granulations (20 tonnes a day).

Endosulfan (1600 tonnes; May 1980) will be produced and formulated at Udyogmandal.

Some of HOC's chemicals are also used by the pesticides industry. The company proposes to manufacture pesticidal intermediates like Butendiol, Phosgene, MIC, etc. and set up a multipurpose pesticides complex.

The foreign sector in the industry is represented by eight companies: Ciba Geigy of India Ltd, Bombay; Indofil Chemicals of India Ltd, Bombay; Union Carbide of India, New Delhi; Bayer (India) Ltd, Bombay; Cyanamid (India) Ltd, Bombay; Alkali and Chemical Corporation of India, Calcutta; Sandoz (India) Ltd, Bombay; and BASF India Ltd, Bombay.

The production of technical pesticides by these companies in 1978—having more than 40 per cent foreign equity—constituted 22.7 per cent of total production.

Some of the important Indian companies in the organised private sector include: Pesticides and Brewers, Bombay; Tata Chemicals, Bombay; Kanoria Chemical Industries; Calcutta; Mico Farm Chemicals, Madras; Excel Industries, Bombay; Pesticides India, Udaipur; Punjab United Pesticides, Chandigarh; and Delhi Pesticides, Faridabad; Indofil Chemicals Limited, Bombay.

The pesticides demand estimates are fixed each year in consultation with the state agricultural departments, the plant protection directorate, the ministry of Agriculture and the pesticides industry.

The demand of pesticides is greatly influenced by factors like cropping pattern, climatic conditions, localised pest infestation, effectiveness of extension work carried out by the state and the industry.

The Tilak committee had suggested 100 million hectares to be covered with plant protection measures by 1978-79. The demand for pesticides (technical grade) was estimated at 80,000 tonnes. However, these estimates have since been revised by All-India Plant Protection Conference which met in Delhi in March this year.

According to the conference's reckoning, the consumption of pesticides for agricultural purposes by 1979-80 would be approximately 62,000 tonnes to cover an area of 80 million hectares.

In addition, about 29,000 tonnes of technical pesticides would be required for malaria eradication programmes.

The Pesticides Association of India, on the other hand, has estimated that by 1983-84, India will use on farming and public health purposes about 144,625 tonnes of pesticides.

The break-up (in tonnes) is as follows:

Insecticides	107,000
Acaricides	275
Fungicides	23,500
Rodenticides	1,400
Weedicides/Herbicides	5,000
Nematocides	275
Plant growth regulators	175
Fumigants	7,000

While noting the declining or at best stagnation trend in the offtake of pesticides, markedly noticeable since 1974-75, the ministry of Agriculture has proposed a modest growth rate of six per cent. It has estimated the demand of technical grade pesticides for 1978-79 and 1983-84 at 47,800 tonnes and 64,300 tonnes, respectively.

The additional investment required to reach the level of production in 1983-84 is estimated at Rs 5,800 lakh.

The Working Group has stated in its report that due to various agricultural development programmes, possible changes in pest-disease complex and substitution of toxic pesticides by safer ones, the pattern of usage of pesticides may entirely change after five to six years rendering it difficult to make any projections as of today in respect of requirements of pesticides by 1987-88.

The report has referred to the phasing out of toxic pesticides by new and safer pesticides in several countries. The Working Group explains that the trend is to use more sophisticated and selective pesticides which are required in smaller quantities. It points out that it is neither desirable nor possible to make a long-term forecast on the pesticides demand.

The Working Group on Pesticides Industry for the sixth Plan period (1978-79—1982-83) has attributed in its report the shortfall (in consumption) to unremunerative prices for agricultural produce like cotton which needs a high dose of pesticides, lack of "desired level of extension promotion work", time lag in the registration of an item and phasing out of popular pesticides like Endrin and Texaphone due to toxic reasons.

The Working Group's projection of six per cent consumption growth makes a poor comparison against priority in investment and development proposed for the agriculture sector. The targetted consumption also falls much below the growth rate of 10 to 15 per cent witnessed in the developed countries.

It is clear that higher offtake in pesticides can come about with all-round agricultural growth coupled with financial relief to the industry which will ultimately help in the price reduction.

Hopefully, the present government has undertaken several ambitious schemes to improve agricultural production and productivity besides offering higher procurement prices to the farmers. They are likely to have a salutary effect on consumption pattern of pesticides.

The measures included creating sizeable additional irrigation potential each year, extensive plant protection measures for pulses, cotton and other crops susceptible to pest damages, large-scale operation for the control of pests and diseases on groundnut, rapeseed and mustard, a centrally sponsored scheme under which 50 per cent subsidy on the cost of pesticides is being provided to the farmers and subsidy for the control of weeds to the extent of 25 per cent of the cost in wheat growing states like Punjab, Haryana and UP.

An important factor contributing towards the development of the pesticides industry is the evolving of a self-reliant technology. Although India has adequate expertise for manufacturing conventional formulations, it is very much dependent on foreign technology for technical grade pesticides.

The difficulty is that after these pesticides are phased out in foreign countries on environmental or public health grounds, a void inevitably creeps in the supply of up-dated technology.

There is also the pressing need for developing pesticidal chemicals which are suitable for country's agricultural and environmental requirements. The National Chemical Laboratory, Pune, the Regional Research Laboratories at Hyderabad and Jorhat, CFTRI in Mysore and the Indian Agricultural Research Institute, New Delhi, have already identified pesticides on which research and development efforts can be started straight away.

The R & D efforts have to be encouraged, both in the public and the private sectors, through grant of subsidy and other financial reliefs like tax holiday for a limited period.

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Point of view

Foreign aid: effect on national economy

Navin Chandra Joshi

The effectiveness of foreign aid basically depends upon the domestic policies, says the author. Foreign economic aid contributes to combating inflation in the recipient country. But it can sometimes increase the money in circulation without increasing the availability of goods produced in the country or arranged through imports. The massive institutions or factories set up through foreign assistance are no solace to the ill-fed or ill-clad masses. These may become a source of serious dislocation in the society.

In the not too distant past, foreign assistance was considered vital for the economic development of an underdeveloped country. Economic growth of nations has generally been identified with an increase in the Gross National Product. In modern times, economic development refers to not only an acceleration in the rate of economic growth but it also implies structural changes in the whole fabric of the economic and the social life of a country. Every economic activity is therefore essentially directed towards bringing about changes which will lead to the maximisation of economic and social welfare.

Foreign aid comes in a variety of ways. Usually it takes the form of grants and liberal loans. These may again be in the nature of all kinds of technical assistance, supply of goods and services, or grant of foreign exchange or credits for meeting trade deficits. All developing countries of the world look up to the developed countries for extending foreign aid of various kinds. Developing countries which are at a higher level of development are expected to provide assistance to others that are at a lower level.

As the diplomacy of economic assistance spread in the early years of this century, the literature on economic development of the Third World also grew. Economic assistance also came to be understood as a political device. The developed nations thought that it was imperative to satisfy rising expectations of the people of poor countries as otherwise they would turn to radical political solutions. Aid started following in disjointed, ill-conceived and ill-planned manner rather than on a sustained long-term basis. The task of assessing the demand of under-developed countries for foreign aid was neither given any serious thought nor was it easy to do so. However, one comforting feature in evidence in recent times has been that a kind of debate has started in developing countries to find out as to whether foreign aid can help a country reach the stage of self-sufficiency through economic development. It has now been realised that it is not the quantum of aid but the contribution that it makes in the totality of development that is more significant. This kind of consciousness has arisen also for the reason that now aid from individual countries has become less important in comparison with aid from international institutional agencies.

A developing country needs to judge the impact of foreign aid at the micro as well as the macro levels. In the past, attempts were made in some countries to evaluate the effect of foreign capital in the net addition to domestic national income. But then, with diverse kinds of foreign aid, it became increasingly difficult, if not impossible, to evaluate the totality of impact in so far as economic development is concerned. To date, there is no fool-proof method which could enable quantification of the impact of foreign aid in its various ramifications. This is due to the reason that the nature of aid has been changing from time to time and more particularly, the impact of aid in the form of human resources is almost impossible to quantify. In recent times, aid in the form of human skills has become quite predominant. This has made the task of evaluating the impact an exercise in guesswork. Hence, the more reliable method of evaluation remains to be an estimate of contribution by various inputs either in physical units or in terms of money.

It is true that the overall impact of

foreign aid cannot be probed into at great length. The better course is to evaluate its overall effect in the national economy and the national life through judging its impact on the crucial issues of the country's economic problems. As long as foreign aid and indigenous non-aid resources are mutually exchangeable or substitutable, using aid resources for developmental purposes means that non-aid resources are available for current consumption. Similarly, if aid resources contribute to current consumption internal resources can be used for capital formation. However, the net contribution of foreign aid to the productive capacity of a country depends both on the economic policies pursued by the recipient country as also on the overall total disposable resources at its command.

increased money supply

It is also true that foreign economic aid contributes to combating inflation in the receiving country. At the same time, aid can sometimes increase the money in circulation without increasing the availability of goods produced within the country or through increased imports. However, the total impact will also be determined and affected by the recipient country's fiscal and monetary policies, the demand for and the volume of imports, the wage and price policies and the general level of living in the country. In any case, foreign aid will lead to inflation if the amount, kind and timing are such that it increases consumption or reduces savings and consequently investment also.

In fact, the impact of aid resources on the capacity they create in the economy extends far beyond the point where the resources are applied. The creation of capacity in some lines may have a greater growth potential than in others. In such cases, a mere reckoning of the direct or proximate contribution of aid does less than justice to a reasonable appraisal of its contribution. For example, there are some intangible benefits flowing from foreign aid. It enables a considerable improvement in the understanding between the countries because of an enlarged exchange of people and information about each other in both the countries. It creates a deep, abiding and invisible psychological effect arising from a greater knowledge and consequently better appreciation of mutual merits, difficulties and problems. Even in the technical field, a new expectation of efficiency takes root. No country can consolidate its expertise in any specialised branch of learning unless the technical knowledge and skills of its experts are of international standard. It is from this angle that the technical and economic cooperation between nations of today becomes of crucial importance.

From the standpoint of aid-receiving countries in general, the rationale behind external assistance is intimately related to their urge for rapid economic development with a view to achieving an improved standard of living. The vicious circle of poverty, they think, can be broken only if people can save and invest adequately. This being a painful process, foreign aid does play a supplemental role in finding the necessary capital, thereby vicariously preventing serious political and social disorder. However, if foreign funds are merely substituted for domestic savings, consumption is bound to go up with the result that there will be no increase in the total rate of capital accumulation.

strategic shortages

Naturally, therefore, the effectiveness of international investment will depend basically on domestic policies designed to withhold resources from immediate consumption and to direct them for capital formation. This points towards the necessity of overcoming strategic shortages which arise in the process of domestic mobilisation and redirection of investment for building up an industrial complex. Evidently, foreign aid has not been helpful in overcoming strategic shortages of foodgrains and raw materials in this country.

Another important issue that arises in appraising the impact of foreign aid in the recipient country is the absorptive capacity of that country. The absorptive capacity should be such that the marginal productivity of capital is positive. The marginal productivity of capital may in some cases be found to be zero in the sense that additional investment financed by foreign aid does not create an increase in output in the initial years of its use. Yet, however, investment must start as a sequence of events that will result in considerably higher levels and increases in incomes in time to come.

In sum, the very concept of external aid needs to be understood appropriately both by the donor and the receiving countries. The awakening of the masses in the under-privileged nations of Asia and the awakening of the affluent and privileged nations have lead to the realisation that the fortunate position of the latter is not the result of their innate superiority but to a large extent a historical accident which carries with it the responsibility to share their capital and skills with the former category of nations. In order to be beneficial, these must be directed to solve the domestic problems of inflation, unemployment and lack of supply of critical goods and services.

Foreign aid must supplement the efforts of the people in raising the level of economic development by diluting the creation of dual economy within the aid-receiving country. To the extent it helps in refurbishing the confidence of the people in the planning process, it serves the masses of under-developed countries. If it does not do that, it is not of much consequence. The massive institutions and factories set up by foreign aid are no solace to the ill-fed and ill-clad masses.

major test

On this major test the utility or otherwise of foreign aid should be judged in the setting up of huge projects but at the same time, does not solve (and may indeed enhance as well) the domestic problems of inflation, unemployment, income inequalities, misdirection of domestic resources, distorting consumption pattern and so on, then serious dislocations in the society are bound to arise. There is, therefore, an urgent need to examine the impact of foreign aid at micro level in order to judge the extent and the manner in which it has been able to solve the economic problems of the people in general.

Desai's defeat diagnosed

Kerala Varma

The hysteria whipped up in the name of secularism in order to bring about the downfall of Janata government bears eloquent testimony to the lack of integrity and patriotism of the faction that led the revolt, says the author. The leaders of this faction have given no convincing explanation as to why they did not bring up the charges against the Jana Sangh on any previous occasion. The author believes there must be something radically wrong with a country whose three prime ministers could not fulfil the expectations entertained of them. He attributes it to the failure to preserve sovereignty.

THE CONVERSION of defeat into victory is achievement. Conversely, the conversion of victory into defeat is failure. The Janata government headed by Mr Morarji Desai assumed office under the best of auspices. It enjoyed intensive and extensive popular support and goodwill. In less than two and a half years it has been made to resign. Mr Desai can be credited with converting victory into defeat. Stark as his predicament is, he is no lone sufferer. His predecessor Mrs Indira Gandhi enjoyed the same kind of advantage in the wake of her spectacular victory at the 1972 election. She later manoeuvred the country into the infamous emergency and suffered a crushing defeat at the 1977 poll. The conversion of victory into defeat was accomplished by Mrs Gandhi as well.

Jawaharlal Nehru was the darling of the nation. The love and affection showered on him by the people right in the wake of independence is a national or even a world record. He was not thrown out in disgrace even though he lost thousands of square miles of Indian territory to China. It should be remembered that India's China policy was really Nehru's personal idea. If our defences crumbled ignominiously, so did our economy. The Planning Commission and the ministry of Planning in Nehru's time must be regarded as the vanguard of India's movement towards economic resurgence. And yet Nehru is on record as saying that the Plans have made the rich richer and the poor poorer. Come to think of it, Jawaharlal Nehru also led the nation from victory into defeat.

There must be something radically wrong with a country whose three prime ministers could not fulfil the expectations entertained of them. The prime ministers who fail the nation are not threatened with the prospect of foregoing creature comforts. But the masses who live below the poverty-line must not be made to suffer for the actions of their rulers whom they vote into office. On a superficial view, one can ascribe different reasons to explain the failure of each of these prime ministers. But when these reasons are further scrutinised, they all point to a serious and unpardonable sin, namely, the failure to preserve sovereignty.

Sovereignty is the life breath of government. It is the power of the government to enforce its will within its jurisdiction. It is the duty of every government to keep in readiness the maximum force at its command to meet contingencies arising from internal subversion and external aggression. The monarchies and the traditional democracies who observed the above norms used to be branded as war-mongers by the communists. According to Marxist theory, a socialist state cannot commit aggression. That did not prevent military confrontation between the Soviet Union and China on their common border. The recent border war between China and Vietnam is a more telling example of the fact that socialist professions do not deter socialist states from acknowledging the imperatives of sovereignty.

The king combines in himself the function of the legislature, the judiciary and the executive. Democracy is only a manner of exercising sovereignty where the functioning of the above three departments is laid open to public scrutiny. The aim is to eliminate the risk of the king who is after all a mortal, inducting his prejudices and fads into the administration. The duty to preserve, protect and defend sovereignty is the same in monarchy, democracy or socialism. The legislator, the judge or the minister is only a partial sovereign in respect of the power he enjoys but in order to do justice to his work he has to possess the full understanding and the reflexes of the sovereign.

In the constitution of India we have a concrete document which lays down the guidelines on which India's sovereignty is to be administered. According to it India is a Sovereign Democratic Republic. The first and foremost attribute of the republic is sovereignty. Democracy has only second place. Our constitution also visualises that even when democracy is abridged or bypassed in special contingencies, sovereignty continues to be preserved.

murder of constitution

The purpose and effect of the 42nd amendment brought forward by Mrs Gandhi was to bring the constitution to a nullity and to invest in parliament—a creature of the constitution bound by a five-year term—the power to make from time to time amendments of its choice. The murder of the constitution and the usurpation of powers vested therein by one who derived one's authority by swearing allegiance to it is a crime of surpassing magnitude. It was the inalienable duty of the successor government to bring Mrs Gandhi to book.

The Janata government was not just one of those governments which came into being with a normal five-year term of office. It came with the people's mandate to restore the constitution and democracy. With criminal smugness the new government assumed that the threat to the constitution and democracy was over and even tried to spread the view that the verdict of the electorate was punishment enough for the excesses of the emergency. Fearing that this explanation will not satisfy public opinion, certain half-hearted steps were taken which gifted the culprits with a lot of confidence and cheer.

After forgiving Mrs Gandhi and her colleagues, the successor government, which took pride in its Gandhism, addressed itself to the task of reviving "Mrs Gandhism" or the art of mouthing out populist slogans like socialism, secularism, non-alignment, etc. It was eleven years of practice of just these virtues and a host of lesser ones like price control, concern for women and weaker sections, etc., that landed Mrs Gandhi into the emergency. More or less the same set of virtues kept her father in office for seventeen years. The Janata government has lasted less than three years on the strength of these virtues. Its successors might prove to be even more short-lived if they don't change their ways.

The mistake of denying the republic its foremost character namely sovereignty, was made by Nehru and continues uninterrupted as of now. Mrs Gandhi consolidated the mistake of her father and rounded it off by denying the republic its second attribute—democracy—by attempts at subversion of judiciary. It must be said to the credit of the Janata that they restored most of the democratic rights and reversed the mischief of the 42nd amendment to an extent. In a situation of grave crisis there is no use rectifying minor errors that stem from the neglect of fundamental values.

The first part of the Indian Constitution refers to the territories of the Indian union. Obviously, to a nation state its territory is of the highest importance. And yet, having converted the country into a sitting duck for the aggressor and having lost thousands of square miles of territory, Nehru would not resign. Nor would the country's elite demand his resignation. His successor Lal Bahadur Shastri did show promise of converting defeat into victory but was called away at his (as well as India's) finest hour. The third prime minister—Mrs Gandhi—proved a chip of the old block who resolutely upheld her father's follies. The fourth prime minister was cast in a historic role. He could have played the role of the saviour of the country. But he lapsed into his predecessor's follies. Mrs Gandhi would not allow the opposition to pass a resolution reiterating the old pledge to get the vacation of China's aggression. Without any pressure or provocation Mr Desai said we will not go to war to recover our territories. Of course, we did encourage the Arabs and the Vietnamese in recovering their territories by war. We will not make the nuclear bomb while the option available to any sovereign is that he will not be the first to use the nuclear bomb in case of war.

When the territorial integrity of the nation is made light of and the duty to keep the nation well policed and in the best of military preparedness is abandoned, one is forced to strike funny postures. One can take the president of Pakistan at his word and be persuaded that Pakistan will not make the bomb. Of course, one doesn't trust one's own countrymen that well. Therefore preventive detention must be invoked. By the way, the Gita tells us how Arjuna who wanted to leave the battlefield and

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take up *sanyasa* was persuaded to take up arms and fight and kill the enemy. Mr Desai who led the government was more in the position of *Kshatriya* like Arjuna.

The manner in which hysteria has been whipped up in the name of secularism in order to encompass the downfall of the Janata government bears eloquent testimony to the integrity and patriotism of the faction that led the revolt. The accusers can give no convincing explanation on why they did not bring up the charges against the Jana Sangh on any previous occasion. Secularism is merely a false pretext that serves the personal ambition of a few at the cost of national stability. In the past socialism, non-alignment, etc., have also been invoked as weapons to stab colleagues in the back and it is into that dishonest and disorderly past that the nation is now sinking. But as long as our prime ministers have no concern for our territory and its defence it is no wonder that other ministers will be found peddling their own ware for private gain.

Nehru inherited a government which had the maximum possible national unity. At the end of his rule we were a defeated nation split into feuding states. Mrs Gandhi split us further into feuding districts and put us under her "Imperial" rule. All this happened while lofty aims were being loudly professed. It would have been an uphill task for any government to take us back to healthy nationalism. Nationalism has to rest on the rule of law which in turn rests on an independent judiciary which has to be backed by force if its writ is to be enforced. Mr Desai did nothing to save the country from the elementary failings of his charismatic predecessors. The many others who are there to replace him are equally unconcerned about these failings. That should concern one and all.

Growth rate of groundnut in Andhra Pradesh

M. Meenakshi Bai & G. H. Sankara Reddi

Though several schemes to increase the output of groundnut, a primary source of oil, have been implemented during the last two decades in Andhra Pradesh, there has been no increase in the yield, according to authors who are associated with Andhra Pradesh Agriculture University.

GROUNDNUT IS a primary source of vegetable oil in India. Andhra Pradesh occupies second place in area and production of groundnut in India. Though growth in area under the crop during the past twenty years is spectacular, there are fluctuations in yield of groundnut due to various reasons. Several schemes to increase the yield of groundnut have been implemented since two decades by the state and central governments. An analysis of the yield data covering the period 1955-56 to 1974-75 was made to study the growth rates in various districts of the state.

On the basis of data of production of groundnut in Andhra Pradesh during the period 1955-56 to 1974-75 (Anonymous, 1955-75)* growth rates were studied.

An examination of the difference series even up to the fourth order did not reveal any clear pattern thereby excluding the polynomial family as a possible model for the production trend. Further search based on a simple analysis, unambiguously pointed to the model given below belonging to the exponential family. The fits were then tested for statistical significance and it was found that the fits are good.

$$Y_t = a(1+r)t$$

Where:

$$Y_t = \frac{yt}{yo} \times 100$$

Y_t = Index number of groundnut production

yt = Mean yield of groundnut corresponding to 't' th year

yo = Mean yield of groundnut corresponding to the base year (1955-56)

and 'r' = Compound growth rate

'a' and 'r' are determined through

$$\log Yt = \log a + t \log (1+r)$$

Further the parameter 'r' is tested indirectly by verifying the statistical significance of regression co-efficient 'B'= log(1+r).

The fitted growth rate curves for the districts of Andhra Pradesh show (see table) that the percentage increase in yield of groundnut in nine districts (Hyderabad, Nizamabad, Adilabad, Nalgonda, Srikakulam, Mahaboobnagar, Karimnagar, Chitoor and Nellore) is positive but not statistically significant.

The increase in yield of groundnut in the rest of the districts is negative but statistically significant only in four districts (Kurnool, West Godavari, Guntur and Krishna). Taking the state as a whole, it is seen that there is no increase in yield during the 20-year period i.e., from 1955-56 to 1974-75.

Of the several models tried to study the growth rates, exponential model (compound growth rate model) was found to be the most suitable. The theoretical justification of the suitability of the model is provided by the χ^2 (chi-square) test of goodness for the fit. Groundnut is mostly raised under rainfed conditions in all the important groundnut growing districts of Andhra Pradesh. There is no increase in yield due to unfavourable distribution of rainfall during the crop period in most of the years and reluctance of farmers to take risk in investing on inputs for a rainfed crop. Lack of breakthrough in varieties appears to be another important reason.

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*Anonymous (1955 to 1975). Crop and Season Reports of the Director, Bureau of Economics and Statistics, Govt. of Andhra Pradesh, Hyderabad.

An analysis of growth rate in yield has a useful role in policy decisions. A search for methodology to study the growth rate in yield resulted in: $Y_t = a(1+r)^t$ as the suitable model. The theoretical justification of the suitability of the model is provided by the χ^2 (chi-square) test of goodness for the fit. The growth rate in yield explained by values of the parameter 'r' for the districts in the state has revealed that there is no significant increase in growth rate in yield in any of the districts of Andhra Pradesh during the 20-year period i.e. 1955-56 to 1974-75.

Districtwise Fitted Growth Rate Curves and % Growth Rates in Yield of Groundnut in Andhra Pradesh from 1955-56 to 1974-75 (1955-56 taken as 1)

Name of the district	Fitted growth rate curve for yield	$B=\log(1+r)$	% Growth rate (r)	
Hyderabad	$Y=106.5(1+0.008)^t$	0.0033	0.8	NS
Medak	$Y=140.1(1-0.004)^t$	—0.002	−0.4	NS
Khammam	$Y=137.8(1-0.008)^t$	—0.0033	−0.8	NS
Nalgonda	$Y=89.3(1+0.001)^t$	—0.0005	0.1	NS
Nizamabad	$Y=101.0\ (1+.009)^t$	0.0037	0.9	NS
Warangal	$Y-163.6(1-0.022)^t$	—0.0096	—2.2	NS
Mahaboobnagar	$Y=91.87(1+0.008)^t$	0.0034	0.8	NS
Karimnagar	$Y=80.93(1+0.016)^t$	0.0068	1.6	NS
Adilabad	$Y=91.35(1+0.012)^t$	0.0051	1.2	NS
Telangana	$Y=86.26(1+0.002)^t$	0.0011	0.2	NS
Kurnool	$Y=101.3(1-0.038)^t$	—0.0166(0.0044)	—3.8	Sig.
Cuddapah	$Y=90.9(1-0.0135)^t$	—0.0059	—1.35	NS
Srikakulam	$Y=81.55(1+0.006)^t$	0.0027	0.6	NS
West Godavari	$Y=100.2(1-0.037)^t$	—0.0076(0.0025)	—3.74	Sig.
Guntur	$Y=115.6(1-0.027)^t$	—0.0117(0.004)	—2.66	Sig.
Chittoor	$Y=87.98(1+0.014)^t$	0.0062	1.4	NS
Visakhapatnam	$Y=86.1(1-0.012)^t$	—0.0051	—1.2	NS
Anantapur	$Y=85.21(1-0.027)^t$	—0.0118	—2.7	NS
Nellore	$Y=93.46\ (1-0.01)^t$	—0.0083	1.0	NS
Krishna	$Y=103.0(1-0.043)^t$	—0.01906(0.0035)	—4.3	Sig.
East Godavari	$Y=89.35(1-0.015)^t$	—0.0065	—1.5	NS
Andhra Pradesh	$Y=85.59(1+0.002)^t$	0.001	0.2	NS

NS—Not significant at 5%; Sig.—Significant

Note : The values in parentheses under B values are the Sd. Errors

BOOKS BRIEFLY

Problems of regionalism

Regionalism in India—A Study of Telangana: G. Ram Reddy & B.A.V. Sharma; Concept Publishing Company, New Delhi; Pp 347; Price Rs 80.

Inventory Management—Text and Cases: P. Gopalkrishnan and M.S. Sandilya; The Macmillan Company of India Ltd; Pp 346; Price Rs 34.

How to Prevent Industrial Sickness: Sudarshan Lal; Navrang, New Delhi; Pp 226: Price Rs 35.

The Impact of Irrigation on Rural Development—A Case Study: M.R. Pandey; Concept Publishing Company, New Delhi; Pp 191; Price Rs 40.

Industrial Democracy in Public Enterprises in India: Dr K.L. Gupta; Navman Prakashan, Aligarh; Pp 220; Price Rs 35.

Purchasing Strategy—Text and Cases: P. Gopalkrishnan and M.S. Sandilya; Sterling Publishing (P) Ltd; New Delhi; Pp 272; Price Rs 60.

Reviewed by **Academicus**

REGIONALISM HAS generally come to be regarded in India as not only anti-federal but even anti-national and opposed to the basic interests of the country. This is essentially a negative attitude and unhelpful. A positive attitude would involve analysis of causes of emergence of regionalism, whether and to what exent it is anti-national, whether it is possible and desirable to suppress completely regionalism, and if not, how to reconcile regional loyalties with national integration and loyalty in a vast and varied country like India. The authors of *Regionalism in India—A Study of Telangana* have made an attempt to study the problem as objectively as possible with special reference to agitation for a separate Telengana state.

Why did separatist movement in Telengana which swept like a whirlwind keep both the state government and the Congress party practically paralysed between 1969 and 1971? The battle between the integrationist Congress and the separatist Telangana Praja Samiti (TPS) culminated in TPS winning on the issue of separate Telangana as many as 11 out of 14 parliamentary contituencies in Telangana in the mid-term Lok Sabha elections of 1971.

The authors after a great amount of research have come to the conclusion that the election results and survey data do not establish unchallenged supremacy of the TPS which polled only 46 per cent of votes. According to the authors, the figures and the survey only show how a few leaders could take advantage of the simmering discontent among the few segments of the society caused mainly by inequitable treatment which Telangana received in the economic and political spheres.

The authors' findings are very instructive and carry general validity for other parts of India also where occasionally feeling of regionalism runs high. Almost a quarter of the respondents did not show even the 'awareness' of the existence of the separatist movement. The actual extent of participation in the separatist agitation was only about two per cent of the population of Telangana whereas majority of the respondents reported that the results of the movement were likely to be harmful. But at the same time, majority of the respondents believed that treatment received by people in Telangana region of Andhra Pradesh was less favourable and discriminatory. And yet the majority wanted the contiauence of the integrated state of Andhra Pradesh.

The authors found that the movement emerged with the urban middle class which tried to secure support of peasantry. The most disturbing finding of the study is that "the basic factor behind it (the separatist movement) was party factionalism which sought to use under-development and regional backwardness (of Telangana) to conceal the real political objectives". There was no ideological base and the movement showed that language is not the all-powerful unifying force as people in both regions, Telangana and Andhra, are Telgu-speaking.

The study however projects regionalism as a powerful factor in state politics. The task of nation-building, therefore, has to face the challenge and fulfil itself through satisfying regional ambitions. The democratic experiment which India is trying is bound to lead to the growth of local and regional loyalties. This is the problem which practically all democracies in the Third World countries are called upon to face.

degenerated politics

It is observed that regionalism in India degenerates into street politics and violence. This is mainly because of inadequacy of institutional framework for redressing regional grievances and imbalances. The study conclusively shows that "regionalism is a direct reaction to the long and deep-rooted economic injustice in matters like employment opportunities and economic development." It is observed that economic exploitation creates a new identity solely on the basis of living together in the same area overcoming the cementing forces such as language, caste, religion and party loyalties. What is unfortunate is that factional groups even in the same party use regionalism as a cloak for opportunism and personal ambitions. Regionalism thus evokes a chaotic response.

India as a democracy will compulsively have to be a federal state and if inter-state and regional rivalries within the state are not to be allowed to be exploited by political parties and factions, the only remedy that would be effective is removal of economic disparities and equitable opportunities for economic development. The separatist movements in Vidharba and Marathwada regions of Maharashtra as also in other states can also be explained essentially in terms of economic exploitation. The remedy to save democracy and federal polity to which there are no alternatives is to establish a sound institutional framework that would effectively remedy glaring regional economic disparities and grievances. The suggestion in some quarters that the remedy lies in creating smaller states (though possibly valid in the case of big states like UP and Bihar) may not be the most effective answer to the problem of regionalism as it may create more problems than it solves.

MANAGEMENT AID

The Tandon Committee report and prescription of norms by the Reserve Bank of India have provided a fillip to the study of inventory management. In *Inventory Management—Text and Cases* the two authors have ventured on this project because they rightly felt that at various seminars on inventory management, the executives attending the seminars felt that the books available on this subject are mainly by American and British authors and they are not in a position to adequately appreciate the problems faced by Indian executives in this regard. The analysis of the authors is based entirely on Indian background and is adequately supplemented by case studies representing real life problems that Indian management has been facing. Naturally this adds to the value of the book.

It is observed that inventory manager is always called upon to do a job that is akin to tight rope-walking. On the one hand he has to stock raw materials, components, consumables, packing materials and finished goods so that production and marketing lines are regularly and adequately fed, while on the other hand, he has to reduce the 'idle capital' tied up in inventory to keep down the cost of stocking to a minimum.

Inventory control is planning and devising procedures "to maintain an optional level of the idle resources" which constitute inventories. It becomes necessary to hold these so-called idle resources because there is a time lag between the recognition of a need and its fulfilment; inventory is also held as a precauttion or as a contingency arrangement; there is also a speculative element in holding inventory because of the possibility that prices may rise or certain essential commodities may become scarce.

It is observed that materials, manufacturing and marketing departments are the three main operating sub-systems of an organisation. Inventory which is primarily a stock of goods forms a buffer at these interfaces and enables the smooth transfer of materials from one sub-system to another. The authors have pointed out that by having adequate stocks, the lines can be balanced, and even if one of the sub-systems faces a temporary breakdown, the others need not suffer due to lack of materials as these can be supplied from inventory. "Thus, inventory functions as a bank and decouples successive stages of operations."

It is observed that inventory can be segregated according to usage and point of entry in the operation as: raw materials, consumables, bought-out components, work-in-progress, finished goods, packing materials and spares.

influencing factors

The authors have analysed various factors that influence inventories of various types referred to above. For example, in the case of raw materials, it has been pointed out that their inventory would depend upon consumption rate and the criticality or importance of the item, apart from credit situation and government restrictions. Inventory of consumables enable the production process to function smoothly.

In the case of bought-out components, it is often found that organisations, especially engineering units do not always produce 100 per cent of their output from raw materials, as they find it cheaper and more convenient to buy components from regular vendors. Factors that influence inventory of bought-out components are: make-or-buy decisions, source of development and vendor relations. Vendor relations are built up over years depending upon quality, regularity of supply and financial transactions. Often these vendors operate on a small scale in which case the organisation may have to provide raw materials to the vendor in times of scarcities.

While the production executive tries his best to balance the different lines of production, a perfect balance is practically impossible. Also breakdown in certain work centres or lines can starve others down the line. It is to overcome these difficulties that work-in-progress is stored as the work centre interfaces.

the buffer

Inventory of finished goods acts as a buffer between the production department and marketing department. Size of inventory of finished goods would depend upon market behaviour which will have to be studied systematically by the marketing department which generally is in charge of inventory of finished goods. This problem does not arise in the case of heavy engineering goods which are generally manufactured on a firm order. But in their case the long manufacturing cycle and numerous items which go to make the final product cause all the problems.

The authors have pointed out that spares form an important class of inventories by themselves. Stocking policies differ from one spare part to another. Industries like transport are highly spare-intensive. Taking various factors into account, spare parts have been classified as rotable spares, insurance spares, capital spares, maintenance spares and overhauling spares. The inventories of each type of spares happen to be governed by different considerations and therefore the sizes of their inventories are bound to be different.

While concentrating on building up inventories of various items mentioned above, finance manager's concern must not be over-looked. Investment in inventory has a cost attached to it and the returns will have to be commensurate with costs incurred.

Inventory management or control is assuming great significance and industrial establishments have appreciated the importance of paying adequate attention to this aspect of organisation. But the ubiquitous reaction in India to inventory management is that there is not free availability of materials and therefore the various sophisticated techniques concerning inventory management are for all practical purposes irrelevant in a scarce economy. Though it may take some time to develop sellers' market in India in which case inventory management will come to assume increasing importance, the credit squeeze imposed by the Reserve Bank of India which has linked credit with prescribed inventory norms makes study of inventory management significant even at present. In fact, a case can be made out that inventory management is all the more important in markets where scarcity of various commodities abounds. The authors have succeeded in bringing home all these points with their clear analysis and above all presentation of specific case studies.

SICKNESS IN INDUSTRY

During recent years increasing incident of sickness among industrial establishments has been having adverse effect on the industrial sector of the Indian economy. It is causing increasing unemployment among workers, creating adverse conditions for managing and supervisory staff, loss to shareholders, and demoralisation among promoters. All this has resulted in vitiating the industrial climate with adverse effect on the growth of the national economy. Sudarshan Lal, the author of *How to Prevent Industrial Sickness* therefore thought it fit to seek answers to questions such as: What is meant by industrial sickness? Can it be detected enabling preventive action? Policy in regard to rehabilitation of sick units or preventive action will not succeed unless the problem is analysed in depth. The author proposes to study the problem in all its aspects and make his recommendations.

How is a sick industrial unit to be defined? Is an industrial unit sick when it fails to generate internal surplus on a continuing basis and therefore depends for its survival on external funds? Various attempts have been made to define sick units in terms of cash losses over a period of years, imbalance in financial structure, worsening debt-equity ratio, continual erosion of equity, reserves and working funds, stoppage of production for a certain length of time and so on. Unfortunately no satisfactory definition of the concept has yet been found and it is possible to quote instances where all or most of the above symptoms were observed some time or the other and yet the unit eventually came out successful.

According to the author, symptoms of coming sickness are irregularity in a bank account and in paying statutory liabilities, excessive inventories, under-utilisation of capacity, declining returns on investment, adverse financial ratios (such as current assets/net sales, net profit/total capital employed, net worth/total outside liabilities, etc), increasing desperation and low morale among top management and so on.

As regards the causes of sickness of industrial units, according to the author, the sickness is often the cumulative result of factors like mismanagement (due to poor managerial talent, weak organisational set up, dissensions among directors, etc); on the production side, improper layout, improper maintenance, absence of modernisation, faulty production programme, under-utilisation of installed capacity, lack of product-diversification, reduntant inventories and so on; on the marketing front, entry of new manufacturers, inadequate margins; on the financial side, bad debts, depletion of resources, siphoning off funds; on the personnel management side, overstaffing, absenteeism and strained industrial relations. Also, the causes of industrial sickness may be external to the enterprise such as higher fiscal levies, power cut, inadequate transport facilities or recession.

unit identification

As regards programme of rehabilitation of sick units, the most important and difficult step would be the identification of a sick unit which is potentially viable. This exercise would indicate that first it would have to be ascertained that the enterprise does not suffer from basic structural defects, and even if they are there, they are only marginal. It is on this basis that arrangements will have to be made, according to the author, for financial assistance by taking steps such as provision of clean loans by financial institutions to ragularise irregular accounts, working capital facilities and term assistance for addition, renovation or major repairs and to pay outside liabilities. Of course, this assumes that internal management system is serious about rehabilitation and all or most managerial deficiencies get removed, if neccessary by change of management or mergers.

According to the author, various agencies, namely central and state governments, lending institutions and other statutory bodies can be helpful in preventing or removing sickness of industrial units. Some of the steps suggested as preventive measures are banning industrial units with poor or no scope, proper appraisal of proposed units, provision for managerial training, scrutiny of project reports, ensuring end-use of lent funds and installing a monitoring system with a view so taking up follow-up action, if necessary.

After reading the book one gets the impression that the author has got confused between symptoms of industrial sickness and its causes. The incidence of industrial sickness is particularly appalling in the textile sector and the author should have concentrated his attention on sick textile mills rather than in analysing the problem in very general terms. The author has also failed to give due attention to external factors. He has failed to note that above everything else, it is the vitiating industrial atmosphere created on the one hand by lack of definite industrial policy on the part of government and on the other irresponsible behaviour of trade unions. The seeds of industrial sickness in India should be found in the prevailing economic environment resulting from whims and caprices of government and lack of clear and long term perspective and direction rather than in mismanagement in certain establishments and paucity of funds in the case of some others. Naturally the measures suggested by the author are in the nature of palliatives and would not remove the root causes of industrial sickness in the country.

IMPACT OF IRRIGATION

A micro-study was undertaken at the instance of Kiul-Badua-Chandan command agency in the state of Bihar which was "charged with the responsibility of developing irrigation in a region which had all kinds of problems—topographical, economic, social and administrative" and

Indian Bank

31 Rajaji Road Madras 600001

Summary of Balance Sheet as at 31st December 1978

(Rs. Crores)

1977	Liabilities	1978
5.73	Capital & Reserves	6.58
623.89	Deposits & Other Accounts	773.91
30.53	Borrowings	27.17
15.22	Bills Payable	13.81
79.08	Other Liabilities (including Contra items)	131.63
	PROFIT & LOSS ACCOUNT	
1.30	Profit for the year	1.64
	LESS:	
0.57	Transfer to Reserves	0.85
0.53	Transfer to Contigency Account	0.58
0.20	Balance transferred to Government	0.21
754.65	TOTAL	953.31

1977	Assets	1978
74.89	Cash & Balance with other Banks	94.91
1.36	Money at Call & Short Notice	1.97
185.03	Investments (at Cost)	227.67
398.41	Advances	472.27
1.78	Premises & Buildings under construction	2.05
4.81	Furniture, Fixtures, etc.	5.24
88.37	Other Assets (including Contra items)	149.20
754.65	TOTAL	953.31

Profit and Loss Account for the Year ended 31st December 1978

(Rs. Crores)

1977	Expenditure	1978
37.07	Interest paid on Deposits, Borrowings, etc.	44.71
11.88	Salaries, Allowances, PF, Gratuity, etc.	14.48
6.14	Other Expenditure	7.26
1.30	Balance of Profit	1.64
56.39	TOTAL	68.09

1977	Income	1978
50.56	Interest & Discount	61.72
5.13	Commission, Exchange and Brokerage	5.54
0.70	Other Incomes	0.83
56.39	TOTAL	68.09

All round progress in 1978

Deposits rose by 24% to Rs. 773.9 crores.

Per branch deposits in India rose to Rs 98 lakhs

Investments rose by 23% to Rs. 227 7 crores.

Credit increased by 18.5% to Rs. 472. 3 crores.

Advances to the Priority Sectors rose markedly to Rs. 125 crores and constituted nearly 30% of the total credit in the country.

Credit to small farmers with holdings of less than 5 acres each formed 57% of the total direct agricultural advances.

The Bank opened 29 branches, 1 Agricultural Development Branch, 15 Satellite Offices and 10 Extension Counters.

A Technical Consultancy Agreement was signed by the Bank with P.T. Bank Rama, Indonesia, for providing management and technical consultancy services. This was the first of its kind provided by any Commercial Bank in India to banks abroad.

Total income rose to Rs. 68.1 crores. Net profit amounted to Rs. 1.6 crores as against Rs. 1.3 crores earned during the previous year. A sum of Rs. 21 lakhs was transferred to the Central Government.

published under the title. *The Impact of Irrigation on Rural Development —A Case Study*. The agency desired that before finalising schemes for the development of irrigation in the area, the socio-economic features of the region should be properly identified. This is as it should be because irrigation schemes as they have developed in India so far have been found to be suffering from many deficiencies such as faulty headworks, silting up of reservoirs, seepage from canals and water courses, improper and inadequate field channels and drainage. Even some of the new irrigation projects are suffering from wrong or improper designing of canal alignment, untimely and inadequate supply of water, under-utilisation of potential created, rise in social conflict as a result of poiltical and social factors and adverse effect on income distribution. Many of these evils or defects can be removed only by paying adequate attention to the socio-economic aspect of an irrigation project at all the stages of its evolution and execution. From that point of view, this study is welcome.

remarkable fact

It was observed in the six villages studied, that a handful of households in the category of 10 acres and above own major share of total land area, whereas the proportion of small and marginal farmers is preponderantly large with only a nominal share in the total cultivable land. A remarkable fact has been that bigger land-owners do not lease out land widely; some of them in fact lease in land. It was observed that on account of lack of irrigation facilities and other constraints, the area under double cropping is insignificant. This means a large area of land remains without use during summer.

It was observed by the author that top category of cultivators owning 10 acres and above do not necessarily show the highest yield rate, notwithstanding their enjoying maximum advantage and capability. The author found that small and marginal farmers have proved themselves as good, if not better, as the big landowners in respect of yield rate, in spite of various constraints they have been facing in matters of finance and other agricultural inputs. This implies that "the excess labour which the small and marginal farmers possess provides better substitute for other inputs utilised by big landowners."

It is observed that people remained more employed in irrigated areas than in unirrigated ones.

The magnitute of indebtedness has been considerable in all the six villages studied. Paradoxically top category of landowners account for highest amount of loan per household; the more prosperous families often going in for consumption loans. Village money-lenders and big cultivators are the main suppliers of loans often charging exhorbitant rate of interest going up to 80 per cent. This happens because loans given by cooperative societies are insignificant and have mostly gone to big landowners. The outstandings in the case of big landowners are also high.

According to the author, the above analysis raises important issues which call for early solution. The first thing that needs to be attended to is redistribution of landholdings to correct the skewed nature of income distribution and imbalance of the power structure in the villages. This redistribution would have two aspects, namely reducing the holdings of bigger landowners and raising the landholdings of small and marginal farmers. Along with redistribution of landholdings there is need for consolidation of holdings into compact plots. All this will have favourable effect on yield rates. Since absentee farming is inefficient, the author wants that the practice of outsiders holding lands in the villages should be stopped.

two-fold action

To augment irrigational facilities, two-fold action is necessary—improvement of existing facilities and second, extension of irrigation. Unfortunately even the existing facilities are not fully utilised. There should be happy rapport between the farmers and canal management.

Tubewells seem to possess great potential, and the author has suggested that cooperatives may be established for sinking tubewells and sharing water, especially in summer months when water from irrigational source becomes scarce.

The author has also stressed the need for provision of institutional credit, various agricultural inputs, better marketing facilities and expansion of extension service to teach farmers scientific cultivation and proper management of water.

This micro-study though confined to just six villages in Bihar, is of great significance. Negatively the analysis shows up the haphazard manner in which the irrigational policy of the government was evolved and implemented so far and why the returns were not at all commensurate with the huge funds invested in gignatic irrigational projects. Positively and more importantly the study bring home the point that construction of irrigational projects will have to be preceded not only by a detailed study of the various socio-economic aspects of the command area but by formulation and implementation of comprehensive lands reforms simultaneously with the implementation of the projects. This alone would result in optimal utilisation of the irrigational project and satisfactory returns for investment. The tragedy is that we have been learning these lessons at great cost to the nation, not only in terms of investible funds but also sufferings of millions of small farmers.

INDUSTRIAL DEMOCRACY

Efforts are being made in recent times by management experts, behavioural scientists and police-makers to evolve a system of industrial management wherein a climate of constructive cooperation between management and labour may be fostered. Such efforts have led to the creation of considerable interest in adopting democratic practices in industries in different forms which have technically come to be termed as, 'industrial democracy'. In India too philosophy and practices of industrial democracy have been receiving increasing attention.

Dr K. L. Gupta, the author of *Industrial Democracy in Public Enterprises in India*, which is an abridged edition of his Ph D thesis on the subject, has made an attempt to (a) clarify the concept of industrial democracy, (b) make a critical appraisal of various schemes of industrial democracy introduced in public enterprises in India, (c) draw conclusions from the working of these institutions, (d) assess their future prospects; and (e) suggest suitable measures for ensuring a meaningful and effective implementation of various democratic schemes in public sector enterprises.

The government of India is committed to the philosophy of industrial democracy in public sector enterprises. The industrial democratic structure envisaged consists of works committees, joint management councils, joint and shop councils, workers' representation on the boards of management, and a number of functional joint committees. Besides, growing reliance is placed on collective bargaining.

The author's finding is that though works committees have been enjoying statutory status, they have not proved effective due to factors such as advisory nature of their recommendations, vagueness regarding their functions, inter and intra-union rivalries and general reluctance on the part of management to make use of them.

management councils

Joint management councils set up to promote cordial relations between management and workers, to build trust between the two, to effect increase in productivity, to share responsibility of management and to secure welfare and other facilities for workers have also not been functioning satisfactorily due to factors such as paternalistic attitude of management, bureaucratic machinery, obstructive role of trade unions in their working and unhelpful attitude of workers.

The experiment of worker-directors has not evoked much response due to reasons such as unsatisfactory industrial relations, problem of recognition of representative trade unions, minority participation by workers and qualified support by management.

Shop councils and joint councils have made good beginning; but whether they are really fruitful is yet to be proved.

Collective bargaining has been playing an increasingly important role in regulating labour-management relations in a number of public sector enterprises. But the procedures differ from unit to unit and from industry to industry. But unfortunately collective bargaining is being used more as a short-term device to settle some specific industrial disputes, instead of as an instrument to build-up cordial industrial relations on long-term basis. Obstacles coming in the way of collective bargaining are absence of strong and representative trade unions, delay in implementation of agreements, unfavourable attitude both of management and labour and excessive reliance on compulsory adjudication.

Similar fate is shared by schemes such as profit-sharing, employees' participation in owning shares, joint functional committees and so on.

On the whole the experiment of industrial democracy in public sector enterprises in India appears to have met with limited success due to various factors such as failure of government to take up follow-up action, attitude of management who regard these institutions as a sort of concessions granted to labour under pressure, instead of as an integral part of industrial management, indifferent attiude of workers due to illiteracy, union-rivalries, absence of enlightened leadership and lack of supportive measures by the government.

follow-up measures

According to the author, the measures to make industrial democracy a success lie hidden in the above analysis. There is thus need for effective follow-up measures on the part of the government, fundamental changes in the attitude of management who must view industrial democracy as inevitable and integral part of industrial management, development of strong and representative trade unions, development of appropriate institutional mechanism to truly represent the wishes and aspirations of workers, cultivation of values necessary for industrial democracy, elaborate training programme for workers and their leaders and various other supportive measures (such as reduction of wage differentials, profit-sharing, progressive personnel policy, change in leadership style, granting of autonomous status to public enterprises, etc). The author concludes: "There is need of change from bureaucracy to democracy, shift from old set of values to new ones and efforts to introduce fresh vision, discerning minds and cooperative hands, motivated by clear and audacious zeal and foresight to organise and manage public enterprises in India." Public enterprises should be humanised and should serve as model employers.

The analysis and measures suggested for the success of industrial democracy in India are good as far as they go, but they do not go deep into the fundamentals. What India has been doing is to borrow from the west, especially from Britain, institutions which have taken long to evolve in an atmosphere congenial to their growth and development and plant them on an alien soil and wait for success. Institutions established in India in the name of industrial democracy are a mere replica of foreign institutions and are not germane to the soil. Why should they be accepted blindly as sacrosanct knowing for example that such institutions do not exist in the USA? When even the political democracy with the elitist class at the top is reduced to a grotesque farce, how can we expect industrial democracy wherein vast poor and illiterate masses are involved to work smoothly. Advantage is taken of the situation by a few unscrupulous political leaders to gain their personal ends leaving the workers to their miserable lot. The main reason for our failure in most spheres including that of industrial democracy has been that our vision and thinking has been circumscribed by western mode of thinking and institutions. One very much doubts whether industrial democracy as conceived by Indian policymakers in the image of western institutions would ever succeed in India. The USA and Japan have worked their own patterns. India will have to seek its own solution to the problem in consonance with its own environment, tradition and culture. Borrowed institutions will either not function smoothly or just whither away leaving the problem more insolvable than before.

MULTIPLE CHALLENGES

The purchasing executives of industrial establishments in India have been facing multiple challenges due to scarcity conditions prevailing in the economy. When it is noted that on an average purchase departments account for about 60 per cent of the total expenditure of establishments, it will make clear the tremendous responsibility that rests on purchasing executives. Much of the success of an industrial establishment will depend upon the efficiency with which its purchasing department and officials operate.

P. Gopalakrishnan and M S. Sandilya, the authors of *Purchasing Strategy* have made an attempt to explain with available analytical techniques the basis of purchasing, such as environmental factors, the quality analysis and financial aspects, various intricacies of selecting different suppliers, operational aspects of purchasing, sophisticated tools of purchasing, problem areas of imports and role of canalising agencies, and how excellence can be attained by purchasing executives by professionalisation. The authors have done well to include eight case studies which would help personnel of purchasing department to grasp the various principles discussed by the authors earlier.

onerous responsibility

The term 'purchasing' as the authors have rightly pointed out connotes more than mere 'buying'. The purchasing executive must find out the description and details of various materials needed, send enquiries and obtain quotations from reliable suppliers, negotiate prices and terms and conditions of supply, place orders, follow-up with suppliers to ensure timely delivery of goods and keep good relations with suppliers with prompt payment of their bills. It follows that with proliferation in the availability of different goods and services on the one hand and relative scarcity of critical materials needed on the other, the purchase executive has to be dynamic, innovative, creative and adaptable to ever-changing market environment.

The authors have described the classical 'Five Rights' objective that broadly sum up the fundamental elements of functions of the purchase department—"availability of goods and services of right quality, in the right quantity, at the right time, from the right source, at the right price." By its very nature the purchasing section will have interactions with a host of internal and external groups. That would necessitate improvement in interpersonal relations which would be one of the important means of achieving the objectives of the purchasing departments and executives.

The authors have dealt in detail with various technical topics like purchase intelligence, quality and value analysis, financial aspect of purchasing, various legal aspects of purchasing (which if neglected would bring the purchase department and officials in great difficulties), import substitution, buyer-seller relations, negotiations, purchasing documents, purchasing systems (such as hedging, blanket orders, cash purchases, tenders, subcontracting, etc), problems of international purchasing, role of canalising agencies, and professionalisation and ethics of purchasing system.

To achieve perfection in any profession, training is essential. There is dearth of training facilities in regard to purchasing function and therefore the authors have emphasised the importance of creating regular institutional facilities in this regard.

The authors have done well to emphasise certain qualities in purchase executives —honesty, reliability, impartiality and understanding. They have also emphasised the necessity in each industrial establishment of an organisation to evaluate the performance of the purchasing section and executives who have vast opportunities of making fortunes through shady deals.

complex functions

Every industrial establishment has to perform a number of functions which, with increasing scale of business operations, are becoming more and more complex. It is a sign of maturity that more and more Indian authors are coming forward to write on subjects such as salesmanship, marketing, inventory control and purchase strategy, and that certain amount of sophistication is being shown in the analysis. This is inevitable and needs to be encouraged. Foreign publications which are available in plenty on these subjects assume a totally different environment and hence are not very helpful. The two authors of this book have done well to write a book entirely based on Indian conditions and with Indian case studies by way of illustrations.

There is however one aspect which keeps haunting the minds of readers of this book. The entire analysis and sophisticated tools formulated by the authors as part of purchase strategy assume strict observance of the code of business ethics by both the parties to a bargain. One is afraid that in the face of increasing erosion of moral values and business ethics in India, all the analyses and elaborate tools formulated by the authors would crumble and prove thoroughly ineffectual. The business environment prevailing in India is typified by the remark of one of the prominent industrialists in India who said that before taking any important business decision these days, he does not take counsel of his experts but consults his astrologer.

Books Received

Bangladesh—Development in Perspective: Gilbert Etienne; Macmillan Co of India Ltd, 4, Community Centre, Naraina Industrial Area Phase I—New Delhi-110 028; Pp 142; Price Rs 60.

Price Policy for Wheat in India: D.S. Sidhu; S. Chand and Co Ltd, Ramnagar, New Delhi-110 055; Pp 127; Price Rs 27.50.

Supply Behaviour in Agriculture: Shashikala Sawant; Himalaya Publishing House, 4-A/16 Sangeeta, 71 Juhu Road, Bombay-400 054; Pp 172; Price Rs 30.

The Opera in South India: S.A.K. Durga; B.R. Publishing Corporation, 461, Vivekanand Nagar, Delhi-110 052; Pp 152; Price Rs 60.

Society, Polity and Economy: Dipti Kumar Biswas; B.R. Publishing Corporation, Delhi-52; Pp 200; Price Rs 55.

19th Century English Literary Works: Masoodul Hasan; B.R. Publishing Corporation, Delhi-52; Pp 319; Price Rs 80.

Readings on Music and Dance: Gowri Kuppuswamy and M. Hariharan; B.R. Publishing Corporation, Delhi 52; Pp 211; Price 90.

Essays in Indian Protohistory: D.P. Agrawal and Dilip K. Chakrabarti; B.R. Publishing Corporation, Delhi-52; Pp 392; Price Rs 200.

Archaeology of Soviet Central Asia and the Indian Borderlands: Vols I and II; S.P. Gupta; B.R. Publishing Corporation Delhi-52. Pp Vol I-194 and Vol II-341 Price Rs 400 per set.

TRADE WINDS

Machinery for Turkey

THE MINING and Allied Machinery Corporation Ltd (MAMC), Durgapur, recently shipped to Turkey 255 tonnes of equipment for eight belt conveyors valued at Rs 35 lakhs. These belt conveyers will form a part of the total contract secured by the USSR from Iskenderun Iron and Steel Works, Turkey for its second stage of expansion. The execution of the order was done by MAMC within a time-bound schedule.

The belt conveyor items, comprising structurals, mechanicals and electricals were manufactured by the utilisation of indigenous materials and components excepting heat resistant belts. The execution of the order by MAMC for export to a third country opens up a big horizon and also a bright prospect for securing further export orders from the USSR for the third countries.

Prior to shipment to Turkey, MAMC made a part shipment against another order to West Germany which should also be completed by them shortly. MAMC has another export order in hand for supply of mining equipment valued at Rs 59 lakhs to the government of Afghanistan. The shipment is likely to commence shortly.

Indo-German Trade

India's exports to West Germany increased by 22.7 per cent during the first quarter of 1979 as compared to the corresponding period of 1978. As compared to the main competitors in east Asia—Japan, Hongkong, South Korea, Taiwan and Malaysia—India achieved percentagewise the highest growth rate. German exports to India too showed a splendid performance with a growth rate of 29.4 per cent during the first three months of 1979. In comparison, total German imports increased by 14 per cent and total German exports by 10 per cent during the first quarter of 1979. Amongst the east Asian countries, India holds the fourth position as importer of German products and the sixth position as supplier to the German market. During the first quarter of 1979, India exported to W. Germany goods worth DM 254.6 million (approximately Rs 1,087.14 million) and imported goods worth DM 333 million (approximately Rs 1,422 million), based on German statistics.

Abu Dhabi Order for EIL

Engineers India Limited (EIL) has secured an overseas consultancy and engineering job in Abu Dhabi (UAE) in the face of stiff global competition. Under this contract, EIL is to provide engineering, procurement and construction supervision services to Abu Dhabi National Oil Company (ADNOC) for the execution of its multiproduct pipeline project. The value of the contract is estimated at around $ 2 million. The 150-km, originating from Umm-el-Nar refinery depot will transport petroleum products from the refinery to the town of Al Ain. EIL will design and engineer the pipeline system from its office here and will render services pertaining to surveys, construction, supervision and field inspection etc. from its field office in Abu Dhabi.

EIL has already got four contracts worth $ 10 million in Algeria under which it is providing consultancy services to Sonatrach for planning, scheduling, monitoring, cost control and financial control services for the implementation of a LPG pipeline systems. EIL is also providing engineering, construction and project services for a network of product pipeline systems to Sonatrach.

Sugar Output

According to the Indian Sugar Mills Association, sugar production during the first fortnight of July 1979 (i e July 1, 1979 to July 15, 1979) was about 8,000 tonnes as against 60,000 tonnes during the same fortnight last year. This brings the total production till July 15, 1979 for the season 1978-79 to 5,846,000 tonnes as against 6,361,000 tonnes during the corresponding period last season. The offtake of sugar from factories during the first fortnight of July, 1979 was about 281,000 tonnes for internal consumption and 45,000 tonnes for exports as against 168,000 tonnes for internal consumption and 35,000 tonnes for exports during the same fortnight last season. The total offtake till July 15, 1979 was about 4,731,000 tonnes for internal consumption and 728,000 tonnes for exports as against 3,445,000 tonnes for internal consumption and 96,000 tonnes for exports during the corresponding period last season The total closing stock of sugar with the factories as on July 15, 1979 was 3,677,000 tonnes as against 4,395,000 tonnes on the same date last season.

World Crude Steel Output

Crude steel production in June 1979 in the 29 countries that report their output to the International Iron and Steel Institute was 41.15 million tonnes, a 6.3 per cent increase over the 38.7 million tonnes produced in the same month of 1978. The cumulative output for the first six months of 1979 was 245.03 million tonnes against 227.55 million tonnes for the same period in 1978, an increase of 7.7 per cent. Most of the reporting countries shared this improvement. Steel production in India during the first six months of 1979 at 4.66 million tonnes was marginally higher than the 4.65 million tonnes produced in the same period of 1978.

Air-India Fares

Air-India is likely to increase its international fares shortly in accordance with the recommendations of the International Air-Transport Association (IATA) according to Air Chief Marshal P. C. Lal, the joint chairman of Air-India and Indian Airlines. He said the exact quantum of the increase would be announced after receiving relevant reports directly from the Geneva-based IATA. So far, he had only seen press reports about the IATA decision. He added that he would hold detailed discussion on the fare structure with the airline's officials. IATA announced recently that over 60 of its members had agreed to increase the air fares between 9 to 15 per cent from September 1 to offset the recent fuel price hikes.

IOB Branch in Sri Lanka

The first ever offshore branch in Sri Lanka of an Indian bank will be set up by Indian Overseas Bank at Colombo. The new branch was inaugurated recently by Mr Ronnie de Mel, Sri Lanka's minister for Finance and Planning. The branch, locally christened Foreign Currency Banking Unit will deal exclusively in foreign currency and offer a package of international banking services.

It will accept deposits in sterling and dollar from non-residents, arrange loans in these currencies and turnkey projects in Sri Lanka and other countries. This branch will finance projects approved by the Greater Colombo Economic Commission. The branch is expected to be of interest to Indian businessmen and entrepreneurs setting up projects and joint ventures abroad. IOB has already one branch in Colombo since 1940, but it does not carry out offshore operations.

World Bank Interest Rate

World Bank loans for the first quarter of fiscal year 1980 that began on July 1, will carry an interest rate of 7.9 per cent per annum. This rate is the same as in the last quarter of fiscal year 1979. The bank's lending rate is adjusted every quarter according to a formula under which the rate is reviewed at the end of each quarter and adjusted to the average weighted cost of funds borrowed in the preceding twelve months. To this calculation a positive spread of 1/2 of 1 per cent is added to arrive at the interest rate the bank will charge its borrowers on new loans granted in the ensuing quarter.

Deposit Insurance

Insured deposits of commercial and cooperative banks as at the end of September 1978 stood at Rs 15,369 crores representing 71.0 per cent of the total assessable deposits of Rs 21,659 crores, as against the insured deposits of Rs 14,155 crores representing 71.1 per cent of the total assessable deposits of Rs 19,892 crores in September 1977. This is disclosed in the annual report of the Deposit Insurance and Credit Guarantee Corporation for the year ended December 1978. The number of fully protected accounts stood at 915 lakhs (98.3 per cent of the total of 931 lakh accounts), as against 840 lakh accounts (98.2 per cent of the total of 855 lakh accounts) a year before. As at the end of December 1978, there were 1,021 insured banks, comprising 78 commercial banks, 49 regional rural banks and 894 cooperative banks; the number of insured banks a year before was 975. Since January 1, 1979, 71 more cooperative banks in Uttar Pradesh have been brought under deposit insurance cover.

Out of the total assessable deposits of Rs. 21,659 crores as of September 1978, the share of deposits in fully protected accounts (i.e. deposits upto Rs 20,000) was 56.3 per cent, the balance of 43.7 per cent representing the share of deposits in partially protected accounts (i.e. deposits over Rs 20,000). The percentage of fully protected accounts to total number of accounts continued to be higher in the case of smaller commercial banks as compared with the bigger banks: 99.9 per cent for banks with assessable deposits of Rs 1 crore or less, against 98.6—99.6 per cent for medium-sized commercial banks with deposits exceeding Rs. 1 crore but upto Rs 50 crores, and 98.0—99.1 per cent for bigger banks with assessable deposits exceeding Rs 50 crores.

UTI Clarification

The Unit Trust of India has clarified that its dividend announcement was akin to the declaration of dividend by any company in that the rate of dividend is on the face value of the units as in the case of shares of companies and not on its market value. The investors by and large are well aware of the implications of the dividend announcement by the Trust and do understand the point that on the prices that they pay for the units is not nine per cent the rate announced by the Trust for 1978-79 but lower than that.

Rubber Footwear Industry

The Alkali and Chemical Corporation of India Ltd conducted recently a seminar on footwear under the auspices of the All India Rubber Industries Association. The seminar was attended by over a hundred representatives from the rubber footwear industry in Calcutta and the eastern region. The object of the seminar was to exchange technical knowledge on rubber compounding technology and footwear manufacture with the small and medium sector of the industry.

Inaugurating the function, Mr B. K. Chatterjee of Bata India Ltd, highlighted the technical assistance which ACCI and the AIRIA were rendering to the footwear industry. He spoke of the large

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Mechanical items: Spring washer, precision Hex Lock nut, Flat endless belt leather, Hex nut, Oil seal, precision Hex nut, Hex bolts of different size, O. Rings, slotted gruf screw, Hex socket HD Grub screw, perforated sheets, H.C. spring Spring SK 173, Rubber sheet, Elastic rubber block Sq. Head screw Half dog point M8×16, bearing SKF of different size etc. from HMTP.

Electrical items: Copper conductor PVC insulated 5/core cable Box, Al 5/core 16 mm^2 left bare 650/1100V, PVC insulated, Rose courtncy terminal with washer, cable 1100V PVC strand AL 1×25 mm^2, cable marker of different type and other different type of cable, switch etc. from HMTP.

Intending tenders may see the above materials at respective sites, during working hours on working day. Tender paper may be had from the office of Manager (M&FPS) HQ. on payment of Rs. 10/- (non refundable) payable to M/s. Heavy Engineering Corporation Ltd., Ranchi-4 by crossed postal order only from 13-8-79 to 24-8-79. Sealed quotation will be received in Ranchi upto 3 P.M. on 29-8-79 and will be opened on the same day at 3.15 P.M. in presence of attending tenderers. Tenderers may obtain tender paper well in advance so as to reach this office within the stipulated period. The Corporation will not be held responsible for any postal delay. Tenders should be accompanied with an earnest money @2% of the quoted amount in the form of demand draft in favour of HEC Ltd. or in cash receipted by Chief Cashier/HQ. HECL.

davp 763(80)79

potential for development which existed in the footwear industry. The sixth plan target for the organised sector is 50 million pairs of rubber and canvas footwear.

Tourism Earning in OECD

Tourism earnings of richer countries touched $50-billion mark in 1978.

According to the latest review of tourism by Paris-based OECD, both receipts and expenditure in the field of international tourism within OECD-member countries as a whole topped $50 billion in 1978, representing a remarkable rise of 24 per cent as compared with 1977.

This high growth is attributed to two factors—the persistence of inflation at various levels in the OECD area (averaging seven per cent) and fluctuations in the exchange rates for the United States dollar and for the national currencies of other member countries. However, in real terms, the rise in international tourism receipts in the OECD area amounted to some six per cent.

As regards the four main tourist-generating countries in 1978, there was an appreciable rise in tourist flows from France and the United Kingdom and a more moderate one from was West Germany, while flows from the United States to the OECD area as a whole levelled off.

According to this study the same uptrend in tourist payments for all the 24 OECD-member countries has been maintained in the early months of 1979 too. However, as a direct result of disruptions in world oil supply during the first half of 1979 and escalation in air fares, there has been acute shortageof petrol in a few OECD countries.

There is also some evidence that recent spurt in petrol costs and fear of petrol famine have been exerting some subdued pull on the decision of tourists to undertake long distance automobile vacations and prompting some shift to motor coach or rail transport.

The study notes that the member countries must adapt to an "era of higher-cost energy" as a necessary ingredient in their tourism development programmes.

Metal Output Short of Demand

The outlook for production of non-ferrous metals for the current year, though encouraging, indicates a substantial gap between production and demand and MMTC, the canalising agency, is arranging satisfactorily to fill this gap, according to central Steel and Mines ministry secretary, Mr Mantosh Sondhi.

With none too bright prospects for expanding the production of non-ferrous metals except aluminium, the government has accorded high priority to exploratory efforts by the GSI and Mineral Exploration Corporation Ltd.

Mr Sondhi says that to exploit the large bauxite deposits in the east coast, Bharat Aluminium Co Ltd has commissioned, two feasibility studies. A French firm will study Orissa bauxite deposits for a 600,000 to 800,000 TPA alumina plant with bauxite mining and a 150,000-180,000 TPA aluminium smelter, while a Soviet firm has been assigned the feasibility study for Andhra Pradesh bauxite deposits.

Stressing the need to conserve copper, lead and zinc ore resources to be utilised over a longer span of time, Mr Sondhi says no new major mining and smelting projects for these are proposed to be taken up in the next few years. Activities in this area will be confined to completing the existing schemes on schedule and providing adequate investments for technological improvements, balancing facilities and moderate expansion to obtain maximum mine and metal production.

According to Mr Sondhi a large number of R and D schemes for non-ferrous metals covering mining, beneficiation and smelting are at various stages of execution. The major thrust in this sector is to improve efficiency in mines and plants and recover precious and strategic metals like nickel, cobalt and tellurium present as traces in the ore.

Aluminium production this year is estimated at 250,000 tonnes, compared to 214,000 tonnes last year, giving a growth rate of 20 per cent. Demand is placed at 325,000 tonnes and the gap will be met by imports of which about 36,000 tonnes are in the pipeline. Refined copper production this year is estimated at 23,000 tonnes against 18,628 tonnes last year. HCL will receive 8,000 tonnes of copper during the year, making total availability of indigenous copper at 31,000 tonnes. The demand for copper is placed at 75,000 to 80,000 tonnes, he added.

Tata Scholarship

The trustees of the J. N. Tata Endowment for the Higher Education of Indians have selected 90 new scholars for postgraduate studies abroad for the academic year 1979-80, after countrywide screenings and selection. Many of the new tata scholars have secured admissions to distinguished universities in the US, like Harvard, Wharton School, University of Pennsylvania, Sloan's School of Management, MIT, Stanford, Cornell, and the University of California at Berkeley. In fact the US has monopolised most of the admissions this year, as only three scholars will join universities in Canada and four in the UK. The total value of Tata Scholarships comes to about Rs 14 lakhs. Over and above this amount, 45 scholars of the 90 selected, have also received substantial financial assistance from universities abroad, which is a compliment to the Tata selections. The majority of the candidates will undertake higher studies in technology and engineering.

Notice to Britannia Creditors

The central government has given a month's time to those who have any claims against the nationalised Britannia Engineering Company Limited (Mokameh unit) and the Arthur Butler and Company (Muzaffarpur) Limited.

The government has also asked the claimants to file their applications to the Commissioner of Payments before August 31, at 72, Sayed Amir Ali Avenue, Calcutta.

Names in the News

Corporation Bank has appointed **Mr J. B. Kamath** as Executive Director. Mr Kamath joined Corporation Bank as Additional General Manager in November 1976 with 30 years experience in varied fields of banking in one of the premier commercial banks of India i.e. Central Bank of India.

COMPANY AFFAIRS

India Steamship

THE INDIA Steamship Company Ltd is going to sell three of its ships as scrap shortly. The government's permission to sell these ships is awaited. The company expanded its fleet substantially between 1975 and 1978 by acquiring 13 ships at a total cost of Rs 102 crores. At present, it is consolidating its fleet and discarding some of the old and uneconomic vessels. Earlier, the company sold four vessels as scrap at a total price of Rs 60 lakhs.

The last of the newly acquired ships was commissioned in October last year and all the new ships are giving good service. However, it has been the experience of the management that on the whole the foreign-built vessels are better than those made in the country. As for the servicing of ships is concerned, during the guarantee period, the overseas builders repair and replace worn out parts more promptly than indigenous building yards. The delivery schedules of the Indian yards are long and the deliveries often are delayed.

India Steamship is an expanding company, though the international recession in the shipping business somewhat slowed down its growth. Right now, the company is planning to extend its services, but the exact directions have not yet been finalised in detail since this will largely depend on the changes in international trade movements that are taking place currently. The insured value of the fleet of the company stood at Rs 119.98 crores at the end of 1977-78 fiscal year and the value is expected to go up in 1978-79. In 1977-78 the total freight earnings stood at Rs 36.94 crores and the net profit earned was Rs 51.14 lakhs.

Hindustan Everest Tools

Hindustan Everest Tools Ltd has undertaken a programme to modernise its plant and some of the outdated processes and replace some of the existing equipment, involving an investment of Rs 80 lakhs. The company has been sanctioned a medium-term loan of Rs 50 lakhs by the Industrial Credit and Investment Corporation of India Ltd. The programme will be completed by the end of the current financial year and with its implementation the profitability is expected to show substantial improvement.

The directors have maintained the dividend at 18 per cent for 1978-79 despite a lower gross profit of Rs 23.23 lakhs over a marginally higher turnover of Rs 316.74 lakhs against Rs 30.54 lakhs over Rs 316.18 lakhs in the previous year. Although the export sales have registered a marginal decline from Rs 202.97 lakhs to Rs 191.86 lakhs, the home market sales have registered an increase from Rs 113.20 lakhs to Rs 124.89 lakhs. The company has lost more than a month's production on account of floods and labour unrest. The profitability of the company has declined due to high non-productive expenses, all round increase in the cost of raw materials, consumables, packaging and wage revision, amenities and benefits extended to workers and staff. The management states that the production and turnover during the current year is likely to be better than the previous year.

Hindustan Lever

The directors of Hindustan Lever Ltd have declared an interim dividend of 12 per cent for 1979, subject to tax. This is payable on September 21 next to shareholders registered in the books of the company at the close of business on August 21.

Rameshwar Jute

The directors of Rameshwar Jute Mills Ltd, Bihar, have recommended equity dividend at five per cent for the year ended March 31, 1979 as against nil in the previous year. A preference dividend of 8.57 per cent was given for the last three years. The company made a gross profit of Rs 31.64 lakhs against a loss of Rs 21.58 lakhs in the previous year.

General Electric

The directors of the General Electric Company of India Limited have announced that the pre-tax profits of the company for the year ended March 31, 1979 amounted to Rs 321.32 lakhs as compared with Rs 382.32 lakhs for the previous year. A sum of Rs 181.96 lakhs has been provided for taxation. After transferring Rs 6.35 lakhs to investment allowance reserve and transfer from development rebate reserve of Rs 1.73 lakhs, the balance amount of Rs 134.74 lakhs as compared with Rs 151.49 lakhs for the previous year, is available for appropriation. The directors have recommended that the dividend for the year ended March 3, 1979 should be Rs 1.20 per equity share fully paid up subject to the deduction of tax at source. The directors have, therefore, recommended provision for dividend amounting to Rs 86.40 lakhs and the balance amount of Rs 48.34 lakhs has been transferred to general reserve.

Modipon

The directors of Modipon have recommended issue of bonus shares on one for one basis. They have further recommended that the dividend for the year ended February 28 last be maintained at the previous year's rate of 25 per cent.

Sunil Synchem

Sunil Synchem Ltd has shown improved results for the year ended April 30, 1979. The board of directors has recommended a maiden dividend of eight per cent to the shareholders. The gross profit of the company during last year was Rs 10.40 lakhs of which depreciation claimed Rs 4.91 lakhs and investment allowance reserve Rs 15,000. The net surplus remains at Rs 5.34 lakhs.

The company has ambitious plans for expansion as well as diversification. It plans to expand the capacity of its hard gelatine capsule plant from 400 million to 800 million per year. It has also received a letter of intent and foreign collaboration for the manufacture of a basic drug for hypertension which is currently being imported.

After the increase in capacity to 800 million gelatine capsules per year, the company will be in a position to export a substantial part of its products on a regular basis.

Indian Organic

Indian Organic Chemicals is taking steps to implement the letter of intent for the expansion of capacity of its polyester fibre plant from 6,100 tonnes to 12,200 tonnes per annum. The arrangement for procurement of foreign exchange and technical know-how have been finalised. The major portion of the capital cost of the expansion programme is expected to be financed from internal resources. The company's application for manufacture of microbial in Maharashtra is still under consideration of the government of India.

Elphinstone

Elphinstone Spg and Wvg. Mills Co Ltd has turned the corner. It has recorded a turnover of Rs 4.12 crores (Rs 2.96 crores) for the first five months of the current calendar year, an increase of 39 per cent. It is confident of touching a new high of Rs 10 crores which is 36 per cent of the total turnover, and has export orders worth Rs 2 crores in hand for the current year. The profit for the current five months is Rs 35 lakhs and all this has been achieved in spite of the drastic power cut. Elphinstone has an ambitious Rs 3.43 crores modernisation plan. Of this amount, it wants IDBI to give it a soft loan of Rs 3.10 crores.

East Anglia Plastics

East Anglia Plastics (India) has released interim report for the year ended June 30, 1979. The company's new management has taken steps to economise wherever possible. The new management hopes to improve the total managerial system and the efficiency of the plant and machinery and to diversify the activity of the company. It has sold unproductive assets such as land and building, which have fetched Rs 56 lakhs giving the company a surplus of Rs 31.50 lakhs.

During the year 1978-79 despite severe power shortage for more than six months, the company was able to increase the production. Production of plasticisers was 3,111 tonnes during the year against 2,601 tonnes in the previous year. Production of PVC compounds also increased from 53 tonnes to 885 tonnes. Total sales during the year improved from Rs 3.53 crores in 1977-78 to Rs 4.68 crores during 1978-79.

Shriram Fibres

Shriram Fibres has announced improved results for the year ended March 31, 1979, with turnover up by 63 per cent to Rs 18.62 crores and a net profit of Rs 2.02 crores against only Rs 24 lakhs in the previous year. The profit figures have been arrived at after providing Rs 91 lakh for depreciation. As before, there is no tax liability. The directors have not recommended any dividend in view of the accumulated losses of the past years.

Universal Electrics

The directors of Universal Electrics Ltd, have decided to give a 13 per cent dividend on the three categories of equity shares of the company for the year ended March 31, 1979. In the previous year, the dividend amounted to 12 per cent. The gross profit for the year was Rs 69.42 lakhs. Amounts earmarked for the different heads were as follows: depreciation Rs 23.37 lakh, taxation Rs 17 lakh, reserves Rs 20 lakh, proposed dividend 9.82 lakh.

Nirlon

Nirlon Synthetic Fibres and Chemicals is raising the dividend by 2.5 per cent to 22.5 per cent for the year ended March 31, 1979. Preliminary figures show higher sales and profits. Sales are up from Rs 54.07 crores in the previous year to Rs 59.38 crore in 1978-79 and the gross profit has moved up from Rs 6.05 crore to Rs 6.54 crore.

With depreciation claiming Rs 2.98 crore (Rs 2.61 crore) and investment allowance Rs 1.50 crore (Rs 1.70

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Leipzig Fair Agency in India
319, Commerce House, 140, N-Master Rd.,
BOMBAY-400 023. (Phone: 270186)
C-479, Defence Colony,
NEW DELHI-110 024. (Phone: 623977)
34-A, Braborne Road,
CALCUTTA-700 001. (Phone: 263622)
"Madan House" 16, Moore St.,
MADRAS-600 001. (Phone: 21559)
or at the frontier posts of the GDR.

crores) and with no tax liability as before, the net profit is Rs 2.06 crore compared to the previous year's Rs 1.74 crore. The proposed dividend will absorb Rs 1.57 crore (Rs 1.40 crore). The directors have decided to offer one rights redeemable debenture (non-convertible) share of Rs 100 each for subscription to the Indian resident shareholders for every 25 equity shares held in the company as on September 1, 1979.

Colour-Chem

Colour-Chem proposes to participate in a joint venture with Hoyleys of Sri Lanka for the purpose of promoting a company in Sri Lanka under the name and style of Haycolour. This company will, among other things, undertake the manufacture of pigment emulsions and dispersions for which there is a good market potential in that country. The new company will be registered with an initial capital of Sri Lanka Rs 60 lakh, out of which Colour-Chem will take up 40 per cent of the equity shares of an aggregate face value of Sri Lanka Rs 24 lakh equivalent to Indian Rs 12.12 lakh at the current rate of exchange. Colour-Chem will also provide technical know-how for the setting up and operation of the factory.

New Standard Engineering

New Standard Engineering Co Ltd has reported satisfactory results for the year 1978-79. The turnover advanced by 14 per cent to Rs 969 lakhs from Rs 850 lakhs in the previous year. The profit increased by 22 per cent to Rs 112.08 lakhs (Rs 91.94 lakhs) and after providing Rs 29 lakhs (Rs 24.22 lakhs) for the depreciation and investment allowance reserve, Rs 45 lakhs (Rs 37.70 lakhs) for taxation, a sum of Rs 38.08 lakhs (Rs 30.02 lakhs) is balance. The directors have recommended issue of bonus shares in the proportion of one bonus share for every three equity shares held for which a sum of Rs 39.11 lakhs is proposed to be capitalised out of reserve which stand at Rs 169.48 lakhs. The directors have recommended an equity dividend of 14 per cent (previous year 14 per cent) which will claim Rs 16.42 lakhs in addition to usual preference dividend at 11 per cent. The dividends on both equity and preference shares absorbs Rs 17.47 lakhs.

Bonus Issue by MMC

The directors of Machinery Manufactures Corporation have recommended bonus shares issue on a one-for-four basis and also a higher dividend of 10 per cent (6 per cent) for the year ended March 1979. They have also decided to issue "rights" shares in the proportion of one such share for every share held, subject to the Consent of the Controller of Capital Issues.

The preliminary statement shows a lower gross profit of Rs 78.39 lakh against Rs 88 61 lakh in the previous year, despite higher sales of Rs 13.90 crore (Rs 10.83 crore). The net profit is also lower at Rs 38.04 lakh (Rs 42.77 lakh). Out of this, the proposed dividend on preference and equity shares will absorb Rs 8.21 lakh (Rs 18.93 lakh). Last year, the company had cleared the entire arrears of preference dividends.

Orders on hand as at the yearend amounted to Rs 17.97 crore. The company has arrived at agreements with two European firms for manufactured of certain computer peripherals. The modernisation programme of the Calcutta plant is underway.

Commenting on the current year's working the directors say that the market is strong but despatches have been adversely affected by power cuts. Steps have been taken to instal additional generating capacity. Material costs are showing a rising trend.

Indian Cable

The Indian Cable Company Limited (INCAB) achieved a sale of Rs 4020 lakhs during the year ended March 31, 1979 against Rs 3990 lakhs in the previous year. The export during the year was Rs 284 lakhs. Although the sales were marginally higher, the throughput were lower due to a 73 day strike at its Poona works and disruption of activities caused by intra-union rivalry at the Jamshedpur works during the first half of the year. The company has successfully commissioned its project for the manufacture of Cross-Linked Polyethylene (XLPE) cables during the year. Profit after tax for the year was Rs 110 lakhs being same as last year. Transfer to investment allowance reserve on the XLPE project absorbed Rs 30 lakhs. The board of directors have recommended a dividend of 12 per cent absorbing to Rs 75 lakhs as against 14 per cent last year.

Debenture Issues

The Controller of Capital Issues has so far allowed debenture issues totalling Rs 41.75 crores by 30 public limited companies in the country. Only a few applications for these issues received from such companies are pending with the government. These debentures bear an annual interest of 11 per cent and mature after 12 years. The issuing companies are permitted to pay an additional interest of 0.5 to one per cent in relation to their dividend payments as incentive to the debenture holders.

These debentures are to be issued under the Finance ministry's guidelines announced in September, 1978. They must be listed in the stock markets and can be issued only by dividend paying companies. The total value of debenture issues by an eligible public limited company should not exceed 20 per cent of the company's net worth or gross current assets, less its long-term funds available for working capital purposes whichever is lower. The value of debentures is also subject to a maximum of Rs 2.5 crores.

Reducing Dependence

The funds collected from debenture issues are to be used solely for meeting a company's longterm working capital requirements. The government's detailed guidelines are intended to reduce corporate dependence on unsecured public deposits for the same purpose.

As a measure of protection to the debenture holders, the government has provided that the debentures should be secured against the assets of the issuing companies. Nationalised banks have been appointed as trustees of the debenture holders. The issuing companies are further permitted to buy back the debentures at par value if the market quotations go below this value.

Company Meeting :

The Britannia Biscuit Co. Ltd.

Highlights from Chairman's Statement relating to industrial policy for bakery products

"The prime need of the hour is to create more employment opportunities".

"The objective of growth of small scale sector can be more easily and effectively achieved by utilising the expertise available from the organised sector".

"The observance of nutritional and hygienic standards in production and packaging is of much greater importance in food products and it is here that the organised sector has a special role to play."

"The dissemination of technical knowledge and expertise emanating from the R&D Centre is available for the benefit of small and rural industries involved in food processing."

"Growth must be permitted to the organised sector to enable it to remain viable."

Mr. M.M. Sabharwal

Statement made by Mr M. M. Sabharwal, Chairman, The Britannia Biscuit Co. Ltd. at the Annual General Meeting at Calcutta on 2nd August 1979.

I consider it a great privilege to address you as Chairman of your Company. I succeed Mr. K. Julian Scott, who has laid down the office of Chairman of your Company after a very long and distinguished service as its Chief Executive and then Chairman. His immense contribution to the growth, welfare and prosperity of your Company is well known. With dedication and devotion, he provided dynamic leadership and steered the Company through all its various phases to make it a close-knit and efficient organisation.

Mr. K. Julian Scott set very high standards for the management and staff. Over the years he built up a great deal of goodwill for the Company. Fortunately, Mr. Julian Scott will still maintain a connection with the Company as a non-Executive Director and we shall be able to draw upon his experience and advice from time to time. On behalf of the shareholders, directors and staff, I wish him every success and happiness for the future.

My association with a number of other major industries will, I am sure, help me to make a positive contribution to the achievement of the objectives of your Company and fulfil its obligations to shareholders, employees and society. In this task I seek your goodwill and co-operation.

In the fiscal year 1978/79, the Company passed through some difficult periods. There was prolonged disruption in production in Bombay and Madras factories due to Industrial Relations problems. The havoc caused by the unprecedented floods in the country, particularly in West Bengal, also resulted in further loss of business. Added to that was loss of production due to power and gas shortages.

Our workers are a good lot, hardworking and loyal. They are capable of achieving high standards of production and efficiency. They are well paid and well looked after it is, therefore, unfortunate that they should now and then resort to disruptive tactics which affect production.

Disruption in production only causes hardships to the workmen themselves, to the customers and to the Company. I hope better sense will prevail and any problems faced by the workmen can be resolved by negotiations in a peaceful and democratic manner.

Notwithstanding the difficulties experienced, the results of the Company in 1978/79 can be regarded as satisfactory. The total sales, profit and exports were all higher than in the previous year, although the percentage of profits on sales has decreased from 10% to 9.4%. The sales increased by 10.6% to Rs. 50.62 crores, profit before tax by 3.5% to Rs. 4.75 crores and exports by 15.06% to Rs. 5.60 crores.

Ever since the announcement of the new Industrial Policy by the Government, which provided for the reservation of production of bakery items for the small scale sector, the organised sector of this industry has been greatly concerned about its implementation since it can very adversely affect the prospects for growth and future viability of the existing units. The new rules notified early in 1979 in this respect, lay down certain criteria for the endorsement of productive capacity in the organised sector for such reserved items. These involve far more drastic curbs.

It seems that these criteria go much beyond the scope of the Industrial Policy statement which had merely declared that there would be no expansion of capacity for the organised sector in such reserved items. The stipulation that the production capacity of such units in the organised sector will be restricted to a level achieved prior to August, 1973, will have the effect of under-utilisation of the capacity of these units. Surely the objective of growth of small scale sector can be more easily and effectively achieved if the small scale units are allowed to flourish with the assistance and facilities provided by the Government to expand their output and by utilising the expertise available from the organised sector.

The policy statement had adopted an approach which can be considered pragmatic under certain circumstances when it laid stress on the products of the small scale sector being economic and of acceptable quality and on capacity creation therein keeping pace with the requirements of the economy. A doubt arises whether these eminently practical considerations have been overlooked, inasmuch as it will be counter-productive if large scale shortages result from the organised sector being asked to reduce production below installed capacity.

However, the Government has shown a partial recognition of the role which the organised sector can play in the building up of the small sector, by offering a limited concession to those units which buy and market the same or similar products of small scale industries. In such cases, the registered capacity will be increased to the extent of such buying and marketing. Such a relaxation, though limited, is welcome.

In the past, there has been consistent growth in the demand for bakery products. As a result of the sustained high levels of agricultural and industrial production and larger Plan outlays, there is bound to be considerable increase in purchasing power in the economy which will lead to substantial expansion of demand for bakery products. Both the small and large scale sectors can benefit by this growth of the market and co-exist in co-operation.

One of the confusions in the national debate on the big versus small scale sector arises from the unwillingness to recognise that co-operation and partnership may be an essential ingredient in the progress of both the sectors and the growth of the national economy. The Britannia Biscuit Company is convinced that if the Government creates conditions under which the organised sector can sustain its growth in its traditional line of business and at the same time assists in the development of small scale units, the growth of economy will be assured, accruing benefit to all concerned.

It is not often realised that the entire organised sector produces no more than one-third of the total volume of bakery products, and it would therefore be obvious that the presence of the organised sector has not inhibited the cottage or small scale sector.

Obviously no generalisation can be valid in respect of all the items reserved for the small scale sector. The relative shares of output, marketing conditions. growth rates of demand and capital requirements are so varied that it is hardly appropriate to apply one set of rules to determine registered capacity or production levels for all items reserved for small scale sector. Nor can sensitive items like food products be placed on the same footing as some other reserved products. The observance of nutritional and hygienic standards in production and packaging is of much greater importance in food products and it is here that the organised sector has a special role to play by virtue of its expertise and the facilities available to it under Research and Development activities, the expenditure on which may be far beyond the resources of the small units. In the context of these considerations, it is hoped that the Government will review the list of food products now reserved for small scale sector.

None can dispute that the prime need of the hour is to create more employment opportunities so that millions who are unemployed and who subsist below the poverty line, should have opportunities to improve their living standards, and in this task no sector or industry, big or small, can be neglected. The organised sector should be allowed to play a major and active role in developing the small scale sector. The organised sector with its experience, knowledge and wherewithal, can greatly assist the rapid development of the small scale sector as indeed is being done in some industries.

Whilst all this can be done and must be done by the organised sector not only in its enlightened self-interest but also as a prime social responsibility to create more employment in the country, some growth must also be permitted to the organised sector to enable it to remain viable and safeguard its investment and employment.

Unless there is a strong production base for the domestic market with some potential for growth, it is not possible to remain efficient, nor is it possible to enjoy the fruits of Research and Development effort, nor indeed to combat rising costs through productivity and economies of scale. Furthermore, exports cannot replace the domestic market. Production diversification will also be impossible without a strong and viable enterprise.

Over the years through great efforts, Britannia has built up a market for its products in India and abroad—it has established technical competence; afforded particular importance to the nutritive value and hygienic aspects of its products, thereby setting high standards, and has been able to achieve a high degree of consumer satisfaction. Great importance is given by your Company to its export performance which is reflected in the increased foreign exchange earnings in 1978-79. As an Export House, we constantly endeavour to enlarge our product base and, as a result of sustained efforts, we hope to achieve further improvement in our exports in the years to come.

Britannia is constantly making efforts to improve the quality and to enlarge the range of its products. The Company is in the process of developing low priced high protein biscuits for the poorer sections of the society. To successfully develop and market such speciality and nutritive products extensive Research and Development work is necessary. For this purpose, the Company has established a Research and Development Centre with facilities to provide the right products and services in the most efficient and effective manner.

The Research and Development Centre will be fully equipped to carry out work not only for the Company but also for overseas firms engaged in food manufacture and we expect to earn foreign exchange by sale of technology abroad. The dissemination of technical knowledge and expertise emanating from the R & D Centre is also available for the benefit of small and rural industries involved in food processing. The Company has the expertise, the will and desire, and the enthusiasm of a young group of scientists and technologists and we expect that this Centre will make significant contribution in the area of Food Research and Development.

Apart from developing processes and products, the Research and Development Division has been associated with the development of National Standards and Regulations for various food products and food raw materials by actively participating and making useful recommendations to the Indian Standards Institution.

With regard to the Diversification Projects. I am happy to report that in response to our application for permission to manufacture Soya-based products, a Letter of Intent has been issued to us in May 1979. We are proceeding with the implementation of this project in Madhya Pradesh as planned. As regards Anthraquinone for which we received a Letter of Intent earlier, negotiations are in progress to secure the appropriate technology. We are re-considering the Footwear Project since it is export-oriented and the foreign collaborator is not prepared to provide a firm commitment of offtake.

We continue to explore the potential for growth in other areas to expand the business and increase the value of shareholders' investment in the Company.

The success achieved in the year under review could not have been accomplished without the loyalty, skill and support of our management staff and the hard work and co-operation of our employees. On your behalf and on behalf of the Board of Directors, I would like to express my thanks to all of them for their contribution to the year's results.

Your Company now is on the threshold of a new era. In addition to the existing business operations. the Company wil be extensively engaged in new and diversified activities. In view of this, it has been considered appropriate to change the name of the Company to BRITANNIA INDUSTRIES LIMITED. The name will be adopted subject to approval of the shareholders at the Annual General Meeting and the Company Law Board.

I firmly believe that where there are challenges there are also opportunities. I am fully confident that with the talent and expertise we have in the Company, we shall continue to make steady progress.

Note : **This does not purport to be a report of the proceedings of the Annual General Meeting.**

Rajasthan Financial Corporation

Address to the 24th Annual General Meeting of the Shareholders, by the Chairman,

Shri R. D. Thapar

Gentlemen

I have great pleasure in welcoming you to the 24th Annual General Meeting of the Shareholders of this Corporation. Copies of the annual report on the working of the Corporation during the year and statement of accounts and the Auditors' Report thereon have been in your hands. I shall, with your permission, take them as read.

2. I assumed charge as Chairman of your Corporation on October 27, 1978. Thus for the first six months, the Corporation continued to receive valuable guidance from the previous Chairman Shri Mangal Behari. The progress made by the Corporation during the year owes a great deal to the close interest that he took in its functioning.

3. Following certain policy decisions by the Central and State Governments in favour of the small sector and the 'tiny' sector of industry, the concerned promotional institutions in the field, your Corporation being one of them, have taken steps to play their role accordingly. With the reservation of 807 items of manufacture exclusively for the small sector by Central Government, the introduction of the Automatic Refinance Scheme for term assistance upto Rs. 5 lacs to all primary lending institutions by IDBI and extension of 'composite' loans, covering fixed and working capital and even minimum consumption needs upto Rs. 25000/- for the tiny units, a promising outlook for small and tiny sectors has emerged. As our contribution in this behalf, the Corporation took a number of decisions for facilitating the grant of loans to the small and the tiny sector. The most important of these are:—

(i) powers of sanction of loans upto Rs. 25,000/- have been delegated to branches for the first time. Loan sanction power of the Managing Director has also been enhanced to Rs. 2 lacs;

(ii) financial and technical appraisal of loan applications upto Rs. 2 lacs is done at branch level;

(iii) loans from Rs. 2,000 to Rs. 10,000 are also now being given by the Corporation;

(iv) terms and conditions of loan sanction have been simplified and standardised. Applications are scrutinised with speed and effort is to finalise the case within a maximum period of 3 months;

(v) margin in deserving cases can be reduced from 25% to 10%. Besides in suitable cases 75% of the project cost but upto the value of fixed assets may be financed by the Corporation;

(vi) loans upto Rs. 6.5 lacs and subsidy thereon are disbursed at branch level. Execution of documents on these loans are also done at branch level;

(vii) repayment of loan has been linked with the first date of disbursement instead of date of execution of documents;

(viii) repayment of instalments of principal and interest will now be quarterly.

District Industries Centres and RFC

4. The start of nine DICs in the State during this year and seven more having been sanctioned recently has enabled your Corporation now to go to small towns and villages. Our financing, the bulk of which had been confined earlier to the industrial areas in Jaipur, Jodhpur, Alwar and Kotah towns will thus get truly dispersed and decentralised over a large number of industrial areas developed by RIMDC and in other towns and villages. We may look forward to a very active complex of institutional arrangements through DICs for helping the small industrial sector, wherein your Corporation will have a leading role to play. A 'Mini' Industrial Revolution over the countryside, complementary to the 'Green Revolution' should be in the offing, with wide dispersal of electric power, institutional credit and marketing support. This would require joint and coordinated functioning of your Corporation with other state organisasions such as RIMDC, RSIC and the Directorate of Industries on the one hand and with the banking sector on the other.

Joint Functioning with Banks, etc.

5. We have offered to undertake joint financing along the Banks in the interest of our common clients. It is our considered policy that while we shall boldly respond to the growing needs of the decentralized industrial sector by opening branches alongwith the District Industries Centres and even beyond the district level where concentrated industrial development takes place, we would not multiply field staff where other official agencies functioning under or through DICs have adequate staff to be able to fulfil our needs too. The same is our approach towards the Banks. Your Corporation has already come to an understanding with the Bank of Baroda who are the LEAD Bank in ten districts of the State, to share their facilities in the form of branch organisations for joint financing. We would watch our experience in this respect hopefully and have offered similar cooperation to other banks. Rajasthan has already a network of about 1000 branches of commercial banks and regional rural banks spread all over. I hope a review shall constantly be made by all the financial and promotional agencies, serving small and medium industries to ensure cooperation and coordination at the grassroots with economy and efficiency as the sole objective.

Fast pace of investment in Small Sector

6. With disbursements in the first three months of the current year having exceeded Rs. 3.00 crores and sanctions approximating Rs. 7.00 crores, we may close the current year with a disbursement of Rs. 15.00 crores and effective sanctions not below Rs. 25.00 crores. Already the current plan targets have been revised from Rs. 100.00 crores to Rs. 125,00 crores. These achievements give us hope to play a significant role in bringing the State closer to some of leading States in the field of medium and small sector of industries.

EASTERN ECONOMIST

INDEX TO VOLUME 72

Nos. 1 To 13

JAN. TO MARCH 1979

ABBREVIATIONS

Leading Article	LA
Point of View	PV
Capital's Corridors	CC
Window on the World	WW
Moving Finger	MF
Trade Winds	TW
Books Briefly	BB
Records and Statistics	RS
Readers' Roundtable	RR
Interview	IW
Feature	FE
Budget Number	BN

(For Company Affairs see pages 102 and 105)

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A

Administration

rt of the Possible, The LA 177
Cabinet Changes TW 199
DBI Directors TW 593
anata Panel on Big Houses TW 199
Ordnance Factories Board TW 38

Aid, Loans and Grants

Assistance from Britain TW 199
Assistance from IFAD CC 570
Assistance from UK TW 688
Canadian Loan for Agriculture TW 332
Exim Offers Credit TW 251
German Loans to Developing Countries TW 332
IDA Assistance for Power TW 163
IDA Loans for Cooperative Societies TW 165
Japan's Aid Programme WW 119
Third World Energy Projects TW 164
UK Assistance for Coal TW 163
US Aid Policy, Distinct Shift in WW 283
Yen Assistance for Fisheries TW 332

Association News

FICCI Eastern Region Conference LA 56
Indian Chamber of Commerce LA 217
Indian Economic Association LA 4

Aviation

Air-India for IATA TW 78
Exim Offers Credit TW 251

Awards

Advertising Awards TW 17
Export Awards TW 689
FICCI Awards TW 293
IMC Awards TW 386
Import Substitution Awards TW 690
Inventions and Substitutions Awards TW 295
Marketing Awards TW 253
Sugar Cane Crop Competition TW 292
TI Cycles Wins National Award TW 334

Academicus BB 28, 242, 376

Agarwala, Prof. P.N. PV 110
Agarwala, R.P. WW 329
Aldaba-Lim, Dr Estefania WW 18
Arya, K.C. PV 317
Attar Chand WW 195

B

Banking, Money & Finance

ADB Interest Rates TW 335
All is not Well LA 352
Budget Must Help LA 265
Consortium Finance by Banks TW 75
Credit and Money Supply TW 165
Credit Directives LA 268
Dollar Decline Makes Trade History WW 287
Exchange Value of Rupee TW 251
Economic Survey: 1978-79 RS 389
Finances of Small Pvt Ltd Companies RS 662
Financing New Investments LA 179
Finance Bill: 1979-80 BN 505
Foreign Exchange Symposium TW 165
Gold in International Finance PV 9
Holding The Nation to Ransom LA 55
How Well Do Banks Serve the People? PV 184
DBI Bonds TW 333
LIC in the Capital Market PV 222
Maharashtra State Financial Corpn TW 293
NCDC Bonds TW 335
Operational Efficiency of Banks TW 79
Outlook for Centre's Finance LA 5
Progress of Credit Institutions RS 208
Public Too Has Rights LA 213
RBI Governor's Advice to Bank Managers RS 661
RBI Out of Step with Credit Needs PV 677
Restraint on Bank Credit TW 646
Rupee-Sterling Rate TW 649
Sale of Units TW 202
State Bank of India TW 292
State Bank's Regional Banks TW 333
State Bank Assistance TW 691

Books Briefly

An Alternative System of Health Care Service in India—Some Proposals 28
Asian Business Directory 249
Banking and Working Capital Finance 28
Centre-State Financial Relations in India 376
Consumers' Cooperatives in Third World 242
Diversion of Funds—Myth or Reality 376
Family Planning Under Emergency 376
Financial Administration of India 242
Indian Rupee— From Devaluation to Delinking 376
Introducing Personnel Management in Cooperatives 242
Janata Economic Policy 376
Joint Sector Projects—Concepts, Problems and Prospects 28
Planning for a Futureless Economy 242
Resources for Future Economic Growth 376
Rice Marketing System and Compulsory Levies in Andhra Pradesh 28
Rural Migrants in An Urban Setting 28
Village Studies in the Third World 28
Working Capital Management 242

Budget

A Bullock-Cart Economy? BN 397
A Jekyll-and-Hyde Budget LA 351
Amendments to Budget Proposals RS 655
Budget Documents BN 455, 471
Budget at A Glance BN 487
Budget Must Help LA 265
Communications is Costly BN 441
Direct Taxes: Two Steps Backward BN 411
Finance Bill 1979-80 BN 505
Indirect Taxation: A Massive Dose BN 421
Market Borrowing: A Neglected Potential PV 449
Myth of Agricultural Bias in the Budget PV 451
New Taxes in Andhra Budget LA 353
Professor and His Hat-Trick, The LA 309
Railway Budget: Surplus for the Third Successive Year RS 342
Union Budget CC 357
West Bengal: Resources without Power LA 665

State Budgets

Andhra Pradesh TW 331
Gujarat TW 331
Punjab LA 671
Rajasthan LA 621
West Bengal TW 382

Balasubramanian, V. PV 104, 674
Balasubramanian, V. BN 397
Bhalla, V.K. PV 9
Bhargava, P.K. PV 365
Bhatt, V.R. WW 69, 153, 232, 373, 641, 682

C

Coal

Coal for Power Stations TW 649
Coal Production CC 145
UK Assistance for Coal TW 163

Collaborations

Austria Extends Its Hands of Friendship WW 329
Business with Moscow LA 668
Cooperative Congress TW 650
India-Canada Joint Commission TW 120
India-France Cooperation TW 36
India-South Korea Cooperation TW 333
Indo-Afghanistan Collaboration CC 145
Indo-EEC Cooperation LA 266
Indo-French Cooperation TW 383
Indo-Iraq Economic Ties WW 327
Indo-Polish Joint Commission TW 646, 688
Indo-Yugoslav Economic Cooperation CC 570
Links with Sri Lanka LA 313
Trade and Friendship LA 178
Twenty Years of Indo-Soviet Cooperation PV 229

Committees and Commissions

Chokshi Committee Report, Bill on TW 251
Committee on Cost of Crops TW 690
Committee on Shipping TW 199
Janata Panel on Big Houses TW 199
Report on Industrial Licensing CC 624
Working Group on Textiles TW 592

Company Affairs

Appointment of Sole Selling Agents CA 199
ARDC Interest Rates TW 591
Ashok Leyland to Transfer Knowhow TW 335
Assistance for New Vessels TW 334
Bajaj Electricals TW 332
Battery Operated Motor Cycles TW 333
BHEL Turbine for Thailand TW 254
Cement Against Foreign Exchange TW 163
Concorde is Profitable TW 590
Cost Inflation Hit Engg Units TW 201
Demand Dynamic, The (ICICI) LA 667
Development Centre for Sports Goods TW 202
Directory of Galvanisers TW 335
Disposal of Silver by Bombay Mint TW 201
Eimco KPC Exports to Bangkok TW 648
Ferro-Cement Gas Holder TW 292
Finances of Small Pvt Ltd Companies RS 662
Fluorescent Tube Unit TW 592
GIIC Loans TW 690
GSFC TW 591
Hindustan Zinc TW 77
Hindustan Teleprinters TW 121
HSCL in Construction Industry PV 674
Issue of Rights Shares TW 163
Janata Panel on Big Houses TW 199
Kudremukh Project TW 386
Mica for Romania TW 163
MSFC TW 690
National Fertilisers Limited TW 649
New Power Cables TW 122
New Versatile Cable TW 382
Paper from Bagasse CC 221
Portable Cardiac Care System TW 382

Problems of Polyester Users TW 333
Public Units's Costs on Advertisements TW 650
Shipping Corporation TW 382
Steel Authority of India TW 591
Tata Exports, Award to TW 689
Telco's Spare Parts Policy TW 292
TI Cycles Win National Award TW 334
UP Financial Corporation TW 591

Company Meeting

Consolidated Coffee Limited 81
ICICI Limited 697
Indian Oxygen Limited 160

Chandrasekhar, K. PV 62
Chopra, S.P. BN 411

D

Delegations

British Shipbuilders' Team TW 688
Diamond Team for Europe TW 165
EEC Delegation on Electronics TW 646
French Industrial Delegation TW 292
Trade Mission from Britain TW 77

E

Economy

A Bullock-Cart Economy? BN 397
A Jakyll-and-Hyde Budget LA 351
Aftermath of OPEC's Price Hike WW 113
All is Not Well LA 352
Britain's Economy in 1980 TW 649
Budget Must Help LA 265
Capital Formation CC 672
Conserving Forest Wealth LA 312
Credit and Money Supply TW 165
Crossed Signals for the Snake's Progress WW 153
Cry in the Wilderness LA 4
Demand Dynamic, The LA 667
Disquieting Portents in Economic Trends PV 110
EEC Quest for Monerary Stability WW 21
Economic Backwardness of UP PV 365
Economic Outlook in Eastern India LA 56
Economic Survey: 1978-79 RS 389
Economy in Public Expenditure PV 273
Economy Under Janata Rule, The LA 97
Estimates of National Product: 1977-78 RS 126
For the Children's Sake LA 3
Fruitful Indo-Iraq Economic Ties WW 327
Gold in International Finance PV 9
Growth Trend in Social and Development Expenditure PV 317
Has Rural Poverty Increased in India? PV 627
Holding the Nation to Ransom LA 55
Hope for the Humblest LA 141
IDBI Bonds TW 333
Indo-Polish Joint Commission TW 646
Inter-Industry Transactions in the Economy RS 702
Investment of Provident Fund TW 36
Janata Party Resolution on Socio-Economic Policies RS 171
Liberal Disbursement by GSFC TW 292
LIC Schemes TW 76
LIC in the Capital Market PV 222
Market Borrowing: A Neglected Potential PV 449
National Income TW 77
National Wage Policy and Collective Bargaining PV 62
Nationalisation Propaganda, The Case Against PV 147
Performance of Cooperative Institutions RS 89
Problems of Arrears of Capital Tax Assessment PV 16
Role of Incentives in Tax Structure PV 105
Romanian's International Economic Commitment WW 71
Sale of Unit's TW 202
Shah and the World Economy, The WW 69
State of the US Economy WW 370
States on Trial LA 620
States' Plea on Planning CC 102
Strains in the Common Market; also Success WW 682
Tamil Nadu Feels Squeezed LA 622
Tax and Spend, Rajasthan Budget: LA 621
Trade Unions Vs the People WW 232
US Policies at Sea in the Gulf WW 679
Wanted A Commission of Enquiry on Expenditure LA 99
West Bengal Goes Slow on Reconstruction LA 311
World Bank Atlas for Population and GNP RS 602
World Economy in 1979 WW 155

Exhibitions and Fairs

Engineering Trade Fair TW 37
Man-Made Textiles Fair TW 80
Seminar on Space TW 691
Third Indian Engineering Fair CC 219

Fertilisers

Customs Duty on Pesticides TW 122
Fertiliser Prices Reduced TW 589

Food and Agriculture

ARDC Interest Rates TW 591
Agricultural Prospects CC 672
Assistance from IFAD CC 570
Assisting Small and Marginal Farmers CC 182
Canadian Loan for Agriculture TW 332
Cashew Exports TW 120
Cotton Prices TW 385
Differential Procurement Prices CC 182
Energisation of Pumpsets: Prospects and Problems PV 635
Export of Meat TW 200
FCI and Its Costs LA 100
Food for Work Programme CC 60
Foodgrain Export TW 200
Groundnut Extraction TW 121
Higher Input Prices: Their Impact on Farm Technology PV 277
Inter-relationship Between Farm Size and Productivity in Punjab PV 577
Land Reforms TW 334
Move for US-Canada Wheat Cartel WW 639
Myth of Agricultural Bias in the Budget PV 451
Operation Flood II TW 384
Progress in Irrigation Projects RS 699
Public Distribution System CC 60
Pulses Output TW 385
Punjab Stresses Agriculture LA 671
Reclamation of Alkali Soil and Its Employment Potential PV 360
Seed Production of Pulses, Oilseeds TW 385
Udgir Dairy TW 201
Yen Assistance for Fisheries TW 332

G

Gold

Diamond Team for Europe TW 165
Export of Studded Jewellery TW 38
Gold in International Finance PV 9
Gold Price Increased TW 253
Gold Replenishment Scheme TW 689
Jewellery Exports TW 201
Replenishment Gold Price Increased TW 76
Time Series Analysis of Gold Prices RS 90

Garg, R.B.L. PV 67

I

Imports and Exports

BHEL Turbine for Thailand TW 254
Canadian Exports at Crossroads WW 116
Capability of Indian Engineering Industry RS 301
Carpet Exports TW 292
Cash Export to Quota Countries Withdrawn TW 75
Cashew Exports TW 120
Declining Exports of Plantation Products LA 58
Disquieting Portents in Economic Trends PV 110
Export Awards TW 689
Export Duty on Soapstone TW 200
Export of Meat TW 200, 689
Export Trends CC 672
Export of Packaged Tea TW 252
Exporting Leather Garments PV 67
Image of Indian Tea, The LA 142
Import Duty on Leather Chemicals TW 332
Import-Export Policy CC 570
Import of Studded Jewellery TW 38
Import Substitution Awards TW 690
Incentives for Textile Exports TW 120
Jewellery Exports TW 201
Marketing Rajasthan Handmade Carpets PV 189
Mica for Russia TW 39
Mica for Romania TW 163
Oil Situations CC 7
Pepper Export Outlook TW 293
Soda Ash Imports TW 75
Sugar Export Under OGL TW 39
Tea Export Duty Scrapped TW 331

Industry

Balanced Development Plus Heavy Industry, Romania WW 289
Capability of Indian Engineering Industry RS 301
EEC Delegation on Electronics TW 646
Excise Rebate for Mini Cement Units TW 36
Exporting Leather Garments PV 67
FICCI Awards TW 293
Foreign Investments and Collaborations CC 7
Image of Indian Tea, The LA 142
Index for Industrial Production RS 171
Indigenous Technologies for Rural Development PV 315
Industrial Relations TW 293
Inventions and Substitutions Awards TW 295
Jumbo Jute LA 669
Jute Package LA 355
Large Because Creative LA 619
Licences and Letters of Intent CA 87, 338 597
Marketing Rajasthan Handmade Carpets PV 189
Mini Cement Plants CC 10

Mini Steel Plants TW 646
Nationalisation Propaganda, The Case Against PV 147
Nationalisation of Industrial Units CC 271
New Defence Projects TW 39
Nine Wise Men LA 215
Pact on Commodity Fund TW 688
Productivity Movement TW 648
Report on Industrial Licensing CC 624
Role of Consultancy Organisations TW 79
Rourkela Steel Output TW 78
Soda Ash Imports TW 75
Small Cement Plants TW 165
Small and Developing Industries CC 271
Steel Output in 1978 TW 165
Striking Progress in West Bengal LA 217
Tea Industry Makes Slow but Seady Progress RS 43
To Where The Highways Lead? PV 104

International Affairs

A Centennial Salute to Albert Einstein WW 854
Aftermath of OPEC's Price Hike WW 113
Austria Extends Its Hands of Friendship WW 329
Bonn Too Has A Population Problem WW 288
Canadian Exports at Crossroads WW 116
Crossed Signals for the Snake's Progress WW 153
Distinct Shift in US Aid Policy WW 283
Dollar Decline Makes Trade History WW 287
EEC Quest for Monetary Stability WW 21
Exports a Bright Future, Canada: WW 583
Fruitful Indo-Iraq Economic Ties WW 327
Japan's Aid Programme WW 119
Khomeini's Iran: Economic Prospects and Perils WW 373
Massive Shift in UK's Export Pattern WW 324
Moderate Growth in World Trade: 1978 WW 581
Move for US-Canada Wheat Cartel WW 639
Regional Development Strategy in Europe WW 195
Romania's International Economic Commitment WW 71
Romania: Balanced Development WW 289
Shah and the World Economy WW 69
State of the US Economy, The WW 370
Strains in the Common Market, Also Success WW 682
Urban Development and Employment in The Third World WW 234
US Opts for Austre Budget WW 231
US Policies at Sea in the Gulf WW 679
What Can We Do for the Children of the World? WW 18
What Awaits the US Beyond the Rush to China? WW 193
World Economy in 1979: Unsynchronised Growth WW 155

Iron and Steel

Bhilai Steel, 20 Years of Indo-Soviet Cooperation PV 229
Future of Kudremukh TW 75
HSCL: A Result-Oriented Presence in Construction Industry PV 674
Kudremukh Project TW 386
Mini Steel Plants TW 646
New Elements in Steel Policy CC 182
Rourkela Steel Output TW 78
Stainless Steel Rerolling Industry TW 332
Steel and the Developing World LA 267
Steel Output in 1978 TW 165

J

Jute

Jumbo Jute LA 669
Jute Package, The LA 355

Jain, Usha PV 105
Joshi, A.S. PV 577

K

Kansal, J N. PV 315
Khan, Dr M.Y. PV 222
Kreps, Juanita M. WW 193
Kumar, Jagdish PV 149

L

Labour and Employment

Doctor's Dilemma LA 670
Food for Work Programme CC 60
Holding the Nation to Ransom LA 55
Investment of Provident Fund TW 36
National Wage Policy PV 62
Public Too Has Rights LA 213
Reclamation of Alkali Soil and Its Employment Potential PV 360
Trade Union vs. the People WW 232

Leading Articles

A Bullock-Cart Economy? 397
A Continuing Connection 565
A Jekyll-and-Hyde Budget 351
All is Not Well 352
Art of the Possible, The 177
Business with Moscow 668
Budget Must Help 265
Conserving Forest Wealth 312
Credit Directives 268
Cry in the Wilderness 4
Declining Exports of Plantation Products 58
Demand Dynamic, The 667
Doctors' Dilemma 670
Economic Outlook in Eastern India 56
Economy under Janata Rule, The 97
FCI and Its Costs 100
Financing New Investments 179
For Children's Sake 3
Holding the Nation to Ransom 55
Hope for the Humblest 141
Ides of March are Near, The 139
Image of Indian Tea, The 142
Indo-EEC Cooperation 266
Jumbo Jute 669
Jute Package, The 355
Large Because Creative 619
Links with Sri Lanka 313
Nine Wise Men 215
No New Taxes in Andhra Budget 353
Outlook for Centre's Finance 5
Post-Budget Tea 566
Professor and His Hat-Trick, The 309
Public Too Has Rights 213
Punjab Stresses Agriculture 671
Rajasthan Budget: Tax and Spend 621
States on Trial 620
Steel and the Developing World 267
Striking Progress in West Bengal 217
Tamil Nadu Feels Squeezed 622
Trade and Friendship 178
Trade Follows Janata Flag 216
Wanted: A Commission of Enquiry on Expenditure 99
West Bengal Goes Slow on Reconstruction 311
West Bengal: Resources Without Power 568

Lubell, Harold WW 234

M

Minerals and Metals

Durgapur Alloy Steel Expansion TW 253
East Coast Bauxite TW 253
Global Tin Outlook TW 294
Indo-Polish Joint Commission TW 688

Moving Finger 27, 73, 159, 197, 241, 290, 586, 644, 684.

Mann, Gurtej Singh PV 277
Mittleman, Earl N. WW 584

N

Names in the News

Agarwal, S.S. 122
Ayar, A.R. 295
Bajaj, Ramakrishna, J. 166
Banerjee, Dr Ranjan 335
Bhagavat, T.K.K. 295
Biswas. A.N. 122
Chakravorty, D. 593
Das, Dr P.K. 650
Dave, M.P. 122
Furlong, P.D 295
Gel li, Ramesh 386
Goel, Ram Niwas 122
Grewal, S.S. 254
Gupta, A.K. 166
Gupta, A.S. 593
Gupta, B.N. 166
Ibraham, Ahmed 295
Kanwar, S.S. 122
Kathju, Kailash Nath 166
Khanna, Pratap 39
Khosla, V. 122
Kirloskar, V.S. 80
Menezes, Victor J. 166
Menon, Dr K.K.G. 39
Menon, M.G.K. 202
Modi, U.K. 122
Modi, V.K. 386
Modi, Y.K. 386
Morarjee, Sumati 166
Narayanan, V, 650
Narayanaswamy, P.K. 386
Narula, Satinder 386
Pani, K S.T. 386
Puri, A.S. 122
Purushottam, Rajnikant 593
Rahi, P.L. 122
Rao, G.V.R. 254
Roongta Anandilal 692
Sawhney, Dhruv M. 386
Shah, Bipin R. 39
Shah, B.R. 39
Sharma, Ramnath 39
Sharma, R.N. 202
Singh, S.D. 80
Singh, Kamaljit 122
Singhania, Hari Shankar 386
Srinivasan, N.V. 335
Swaminathan, M.S. 254
Valliappan, A. 122
Vedam, S. 122
Vyas, Dr Pramod 335
Warrier, G.R. 593

Nigam, R.C. PV 9, 451

O

Oil

Aftermath of OPEC's Price Hike WW 113
Arab Energy Panel TW 590
Navigation Aid for Offshore Oil TW 251
Norway Offers Rigs Knowhow TW 333
Oil Politics and Prices WW 641
Oil Situation CC

P

Planning and Policies

Credit Directives LA 268
Land Reforms TW 334
NDC Deliberations CC 357
Nine Wise Men LA 215
Plan Discussions CC 145
Production-Cum-Distribution of Essential Commodities RS 258
States' Pleas on Planning CC 102
States on Trial LA 620

Plantations

Declining Exports of Plantation Products LA 58
Excise Rebate on Package Tea TW 200
Export of Package Tea TW 252
Image of Indian Tea, The LA 142
Plantation Profiles TW 691
Pre-Budget Tea LA 566
Tea Industry Makes Slow But Steady Progress RS 43
Tea Export Duty Scrapped TW 331
Tea in Trouble PV 573
Tea for Sweden TW 589
World Production of Tea TW 294

Politics

Art of the Possible, The LA 177
Ides of March are Near, The LA 139

Power

Coal for Power Stations TW 649
IDA Assistance for Power TW 163
Increased Power Production TW 649
Power Supply CC 672
Third World Energy Projects TW 164

Prices

Cotton Prices TW 385
Differential Procurement Prices CC 185
Gold Price Increased TW 253
Higher Input Prices PV 277
Replacement Gold Prices Increased TW 76
Time Series Analysis of Gold Prices RS 90
Trade Follows Janata Flag LA 215
Wholesale Prices TW 121

Pandya, P.B PV 635
Patel, A.R. PV 635
Prabhakar, Rohit K. PV 189

R

Railways

Hassan-Mangalore Rail Link TW 253
Locomotive Output TW 254
Professor and His Hat Trick, The LA 309
Railway Budget RS 342
Railway Inventories TW 650
Suburban Railway Fairs CC 570

Rural Scene

Energisation of Pumpsets: Problems and Prospects PV 635
Has Rural Poverty Increased in India? PV 627
Hope for the Humblest LA 141
HUDCO's Housing Plan TW 78
Integrated Rural Area Development PV 149
Union Budget CC 357
Urban Development and Unemployment WW 234

Rai, Rajendra 16
Rao, Dr VKRV PV 627

S

Sugar

Bank Credit to Sugar Industry TW 589
Control on Sugar Releases CC 271
Khandsari Evcise Abolished TW 75
Sugar Export under OGL TW 39
Sugar Buffer Stocks CC 182
Sugar Cane Crop Competition TW 292
Reduced Tax on Sugar Cane TW 592
Tariff Value for Sugar TW 592

Sagittarius PV 449, 677
Sain, Inder PV 577
Sen, Sudhir WW 113, 370, 639, 679
Sharma, V.K. PV 149
Simha, S.L.N. BB 249
Singh, A.J. PV 577
Singh, Hardev BN 441
Singh, Karam PV 277
Singh, Dr Parmatma PV 360
Soloman, R. Bhakther PV 184
Srinivasan PV 573
Suri, M.M. PV 451

T

Taxation

Bill on Chokshi Committee Report TW 251
Direct Taxes: Two Steps Backward BN 411
Excise Rebate on Package Tea TW 200
Excise and Customs Concessions CC 624
Import Duty on Leather Chemicals TW 332
Indirect Taxation: A Massive Dose BN 421
Khandsari Excise Abolished TW 75
Problems of Arrears of Capital Taxes Assessment PV 16
Role of Incentives in Tax Structure PV 105
Tea Export Duty Scrapped TW 331

Textiles and Fibres

Cash Aid for Quota Countries Withdrawn TW 75
Cotton Prices TW 385
Incentives for Textile Exports TW 120
Man-Made Textiles Fair TW 80
Textile Products for Sweden TW 383
Working Group on Textiles TW 592

Trade

Carter Changes Preferences List TW 688
Cement from Burma and Philippines TW 251
Dollar Decline Makes Trade History WW 287
Eimco—KPC Exports to Bangkok TW 648
Image of Indian Tea, The LA 142
India-France Cooperation TW 36, 383
Indo-Bulgarian Trade TW 39
Indo-EEC Cooperation LA 266
Leather Goods for Scandinavia TW 590
Mica for Russia TW 39, 691
Moderate Growth in World Trade WW 581
Tea for Sweden TW 589
Textiles Products for Sweden TW 383
Trade and Friendship LA 178

Tata, J.R.D. PV 147

U

Ummat, R.C. BN 421
Ummat, R.C. CC 7, 60, 102, 145, 182, 219, 271, 357, 570, 624, 672.

V

Vakil, C.N. PV 273

Company Affairs

Ahmedabad Advance Mills 295
Alkali and Chemical Corporation 296
Amar Dye-Chem Ltd 296
Andhra Pradesh Rayons 299
Anil Hardboards 40
Ashok Leyland Ltd 204, 652
Asian Cables 596
Atlas Cycle Industries 169
Atlas Copco (India) Ltd 696
Atma Tube Products P. Ltd 595
Atul Products 695
Avanti Leathers 84, 653
Avery India 254

BASF India 388
Bajaj Auto 205
Bajaj Electricals Ltd 42
Bajaj Tempo 337, 654
Ballarpur Industries Ltd 338
Bayer India 595
Belapur Sugar 654
Bharat Forge Co Ltd 300
Bihar Finished Leathers Ltd 653
Birla Jute Mfg Co 83, 255
Blow Plast 205
Bombay Burmah Trading Corpn 387
Bombay Dyeing and Mfg Co 124, 167
Bombay Suburban Electric Supply Co 206
Boots Co (India) 695

Cadbury India 83
Carborundum Universal 41
Ceat Tyres of India 694
Century Spinning and Mfg Co 167, 336
Chemicals and Fibres of India 205, 387
Chloride India 167
Colour-Chem 255
Coromandel Fertilizers 596
Cynamid India 694

Dalmia Dairy Industries 169
Dani Wooltex Industries 86
Deepak Nitrite 338
Dempo Steamships 296
Dr Beck and Co (India) Ltd 596

East Coast Breweries and Distilleries
East India Hotels Ltd 595
Electric Construction and Equipment Co 256
Electrosteel Castings 337
Ellora Paper Mills Ltd 337
English Electric Company 696
Escorts Ltd 387

Excel Industries 595

Fibreglass Pilkington 40

Garware-Wall Ropes 256
Gold Mohur Mills 83
Guest Keen Williams 594
Gujarat State Coop Bank 85
Gujarat State Fertilisers Co Ltd 85
Gwalior Rayon Silk Mfg (Weaving) Co 167

Hada Steel 300
Hindustan Aluminium Corpn 336
Hindustan Instruments 123
Hoechst Dyes and Chemicals 695

Indian Aluminium Co Ltd 336
Indian Explosives Ltd 125, 299, 652
Indian Oxygen Ltd 123, 296
Industrial Credit and Investment Corpn 338
Intercontinental Leathers 167
International Computers Mfgs Ltd 125

Jayanti Vitamins Ltd 125, 205

KAP Steel Ltd 86
K.G. Khosla Compressors 40
Karnataka Aluminium 652
Keltron 256
Khandelwal Herman Electronics Ltd 42
Kirloskar Brothers Ltd 85
Kirloskar Cummins 299
Kalmark Chemicals 206
Kothari Sugars and Chemicals Ltd 207

Madras Rubber Factory 653
Maharashtra Sugar Mills Ltd 596
Mahindra and Mahindra 594
Mahindra Ugine Steel Co 206
Mangalore Chemicals and Fertilisers 695
Mettur Chemicals and Industrial Corpn 256
MM Rubber Co Ltd 654
Monotype India 654
Moran Tea Co (India) 256
Mysore Cements 204
Mysore Paper Mills 123, 169

Nagarjuna Steels 125
National Organic Chemical Industries 696

Oil and Natural Gas Commission 125
Otis Elevator Co 255

Philips India 204
Polyolefins Industries 695
Poysha Industrial Co 83
Precision Bearings India 125
Premier Tyres 83
Pressure Cookers and Appliances 388

Ralli's India Ltd 595
Ravalgaon Sugar Farm Ltd 206
Rayalaseema Paper 596
Rollatainers Limited 83, 299

S.A.E. (India) Limited 84
Scindia Steam Navigation Co 40
Sehgal Papers 123, 168
Sen Raleigh 169
Shah Construction 40
Shree Mansingka Oil Mills 300
Shree Vallabh Glass Works 299
Siemens India 254, 297, 652
Sirsilk Limited 257
Simplex Mills Co 300
SLM-Maneklal Industries 85
Steel Strips Limited 254
Stewarts and Lloyds of India 42, 204
Supreme Industries 86
Sussen Textile Bearings 387
Svadeshi Mills Co 694
Sylvania and Laxman Ltd 255, 596

Tata-Finlay Ltd 596
Tata Iron and Steel Co 337
Tata Mills 169, 296
Tata Oil Mills Co 387
Tractors India Ltd 653
Tube Investments of India 255, 652
Tungabhadra Industries Ltd 596

Union Carbide India Ltd 337, 693
Universal Cables 167

Voltas 83, 206

Repayment of Recoveries

7. The problem of closed units and overdue recoveries have received continuing attention of your Board, as a result 52 out of 154 closed units have been revived. As regards overdues, against Rs. 2.50 crores last year the repayment from our assisted units has been Rs. 3.77 crores this year which reflects an increase of 51%. However, the number and amount of overdue accounts have shown increase in absolute terms. Management is proposing to link recovery of overdue from the units to their cash accruals currently. You will be happy to note that these encouraging results regarding recovery have been obtained without resorting to the Courts of Law in any new case this year. It is our experience that the powers available under the SFCs Act for direct action are adequate and more effective.

Recruitment, Training and Research

8· We are faced with a challenging task of recruitment, training and development of requisite personnel for the managerial cadres both at the headquarter and branch level to meet our fast expanding needs. We are planning a bold programme of recruitment and training accordingly. I also feel that your Corporation should assume a leading role in financing and coordinating research in the field of medium and small industries in all aspects. The health and progress of our loanee units also require a system of monitoring which will enable timly steps being taken for understanding and diagnosis of the causes of slackness as well as for promotional support. It is, therefore, proposed to strengthen the head office organisation for monitoring, Research and Development, and Training of Officers and staff, including training of such district level personnel of industries department who have to function with and for us in the field.

Staff Relations

9. I am happy to observe that since the end of strike in May, 1978 following a cordial settlement between the employees and management, staff relations have steadily improved. I can assure the officers and staff that the management would always be sensitive to their legitimate needs and aspirations and would rely on their continuing support in discharging its functions efficiently.

10. In conclusion, I would place on record my gratitude to Government of Rajasthan, Reserve Bonk of India and Industrial Development Bank of India for their valuable help and guidance. I would also express my sincere thanks to the invaluable counsel and willing cooperation of all my colleagues on the Board. Officers and employees of the Corporation, under the leadership of the Managing Director can look back with pride and satisfaction on their performance this year. Results owe a good deal to their efficiency and dedicated service for which they deserve our appreciation.

11. I am hopeful that we shall be able to respond with confidence to the challenging tasks ahead. I envisage for the RFC the role of a consortium leader of all banking institutions in the State, on the one side in providing finance, and of the service institutions sponsored by the State Government on the other side in providing promotional help to the medium and small industries. I, now commend the Balance Sheet and Directors' Report for your valued consideration.

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FOREIGN AIRMAIL SUBSCRIPTION RATES

Foreign (By Air Mail) Yearly

COUNTRY		LOCAL CURRENCY
Africa	..	UK £ 27
Australia	..	A. $ 40
Bangladesh	..	Taka 325
Belgium	..	B. Franc 1,650
Burma	..	Kyat 207
Canada	..	C. $ 75
France	..	F. Franc 225
West Germany	..	D. M. 107
Hong Kong	..	HK $ 160
Indonesia	..	Rupiah 14,000
Iran	..	I. Rial 2,200
Italy	..	Lira 40,000
Japan	..	Yen 12,500
Kuwait	..	K. Dinar 10
Malaysia	..	Ringitt 85
Mauritius	..	M. Rs 285
Middle East	..	UK £ 25
Nepal	..	N. Rs 265
Pakistan	..	P. Rs 280
Philippines	..	Peso 250
Seychelles	..	S. Rs 350
Singapore	..	S. $ 84
Sri Lanka	..	S.L. Rs 230
UK	..	£ 30
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USSR	..	Roubles 34

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RECORDS AND STATISTICS

Pharmaceutical industry : key statistics

The draft sixth five-year plan has placed the target of investment in the pharmaceutical industry in 1982-83 at Rs 750 crores as compared to the actual investment of Rs 450 crores in 1976-77. Investment in bulk drugs will account for Rs 250 crores and in formulations Rs 50 crores. The production target for 1982-83 in the pharmaceutical industry has been placed at Rs 475 crores and for formulations Rs 1875 crores. Pharmaceuticals exports will amount to Rs 48.60 crores as against Rs 25.23 crores achieved in 1976-77. There will be imports of pharmaceuticals worth Rs 150 crores in 1982-83 as against imports worth Rs 47 crores in 1976-77.

These and some other up-to-date data have been issued by the Organisation of Pharmaceutical Producers of India and are reproduced below.

Sixth Plan Targets

(Rs. crores)

	1967-77	1982-83
Investment		
Total	450	750
Bulk	—	250
Formulations	—	50
Production		
Bulk	150	475
Formulations	700	1875
Exports	25.23	48.60
Imports	47	150*

*Gap to be filled by imports.

Investment in Bulk Drugs Production During the Sixth Plan Period

(Rs. crores)

Year	Public	Private	Total
1978-79	28	12	40
1979-80	30	25	55
1980-81	40	30	70
1981-82	40	20	60
1982-83	12	13	25
TOTAL	150	100	250

Production of Formulations in Sixth Plan

(Rs. crores)

	Sixth Plan Target 1982-83	%	Growth Rate %
Public Sector	250	(13.3)	32.1
Indian Sector	700	(37.3)	19.4
Foreign Sector	575	(30.7)	11.9
Small-scale Sector	350	(18.7)	19.5
TOTAL	1875	(100.0)	

Exports—Sixth Plan Period

(Rs. crores)

	Bulk Drugs	Formulations	Total
1978-79	9.50	21.00	30.50
1978-80	10.70	23.60	34.30
1980-81	12.00	26.50	38.50
1981-82	13.50	29.80	43.30
1982-83	15.10	33.50	48.60
1983-84 (Rolling Plan)	16.00	37.50	53.50

Production of Drugs and Percentage of Population Covered

	Production (Rs. crores)	Population (Million)	Population covered %
1948	10	340	6—8
1958	54	412	8—12
1968	200	500	10—15
1978	1080	632	15—20
1982-83 (6th Plan)	1,900	692	20—25*

*To be covered

Number of Licensed Drug Manufacturers

-	1969-70	1974-75	1975-76
States			
Andhra Pradesh	172	189	213
Assam	12	10	29
Bihar	39	79	153
Gujarat	140	225	247
Haryana	*	68	101
Himachal Pradesh	9	8	9
Jammu & Kashmir	5	NA	11
Karnataka	56	71	76
Kerala	52	57	76
Madhya Pradesh	108	154	287
Maharashtra	736	909	1392
Manipur	—	—	—
Meghalaya	—	—	1
Nagaland	—	—	1
Orissa	24	60	79
Punjab	106	49	53
Rajasthan	51	89	81
Sikkim	—	—	—
Tamil Nadu	199	303	315
Tripura	4	5	6
Uttar Pradesh	198	154	302
West Bengal	255	367	421
Union Territories			
Chandigarh	—	4	3
Dadara & Nagar Haveli	—	4	6
Delhi	81	97	94
Goa, Daman & Diu	8	12	19
Pondicherry	2	21	13
TOTAL	2257	2935	3988

Source : All India List of Licensed Drugs & Cosmetics Manufacturers compiled by the Drugs Controller (India), Directorate General of Health Services, Government of India.

*Included in the figure for Punjab.

Investment in Pharmaceutical Industry

	(Rs. crores)
1952	24
1962	56
1967	150
1971	200
1973	225
1975	250
1977	450†

†Including equity, reserves and longterm loans.

Production in Pharmaceutical Industry

	(Rs crores)
1948	10
1965	150
1968	200
1971	300
1972	360
1973	380
1974	408
1975	560
1976	700
1977	900
1978	1000

Production of Bulk Drugs & Formulations :1976-77

	Bulk Drugs		Formulations	
	(Rs. crores)	%	(Rs crores)	%
Public Sectsr	49	(32.7)	47	(6.8)
Indian Sector	28	(18.7)	241	(34.4)
Foreign Sector	63	(42.0)	292	(41.7)
Small-scale Sector	10	(6.6)	120	(17.1)
TOTAL	150	(100.0)	700	(100.0)

Employment

Direct	
Organised Sector	100,000
Small-scale Sector	50,000
Total	150,000
Indirect	
Distribution Trade	500,000
Ancillary Industries	200,000
Total	700,000
GRAND TOTAL	850,000

Distribution Network

1. Licensed wholesale and retail chemists	100,000
2. Hospital & Dispensaries	15,000
3. Primary Health Centres, etc.	45,839
4. Doctors' Dispensaries & Clinics	140,000
5. General merchants holding drug licences	100,000

Export

	Bulk drugs including Quinine Salts		Formulations		Total
	(Rs crores)	%	(Rs crores	%	(Rs crores)
1975-76	6.99	(30)	16.43	(70)	23.42
1976-77	8.11	(32)	17.12	(68)	25.23
1977-78	8.87	(35)	16.72	(65)	25.59
1978-79	9.50	(31)	21.00	(69)	30.50

Import Substitution

	Imports	Production	Imports as a % of production
	(Rs crores)		
1961-62	11	87	13.0
1974-75	35	408	8.6
1975-76	39	560	7.0
1976-77	47	700	6.7
1977-78	84	900	9.3

Remittance Abroad

(Rs crores)

	Drug Industry*	All Industries**
1973-74	4.67	83.37
1974-75	2.16	106.00
1975-76	4.05	115.30
1976-77	6.34†	N.A.

* Compiled from statement in Parliament by Mr. H. N. Bahuguna, minister for Petroleum, Chemicals & Fertilizers on 28-11-1978.

** Statement in Parliament by minister of State for Law on 6-3-1979.

† Remittances by companies with more than 40% foreign equity only.

Index Numbers of Wholesale Prices

(Base : 1970-71 = 100)

	All Commodities	Drugs & Pharmaceuticals
1971-72	105.6	99.7
1972-73	116.2	101.0
1973-74	139.7	101.8
1974-75	174.9	108.2
1975-76	173.0	118.7
1976-77	176.4	133.9
1977-78	185.6	136.3
1978-79 (Apr.-Dec.)	185.6	136.2

Profitability : An Inter-Industry Comparison

Industry	Profit Before Tax as Percentage of Sale			
	1970-71	1972-73	1974-75	1975-7
1. Coffee Plantations	31.3	25.1	40.5	43.1
2. Rubber Plantations	27.5	24.4	30.4	23.8
3. Paper and Paper Products	16.8	14.3	24.5	20.6
4. Shipping	17.4	14.8	30.8	22.7
5. Chemical, Fertilizers	17.3	22.3	21.0	19.6
6. Dyes & Dye-stuffs	19.1	17.1	20.2	19.4
7. Silk & Rayon Textiles	19.0	15.5	22.8	13.4
8. Medicines and Pharmaceutical Preparations	18.1	15.6	13.4	13.2
9. All Industries (Average)	11.3	10.5	12.0	10.6

Source : "Selected Financial and Other Ratios, Private Corporate Sector 1970-71 to 1975-76." Published by the *Reserve Bank of India*, October 1978.

R&S Expenditure by the Pharmaceutical Industry

(Rs. crores)

1972-73	5.86
1973-74	6.28
1974-75	7.29

Note : R&D expenditure incurred by 40 companies.

Source : Handbook of Research & Development Statistics 1974-75, Department of Science and Technology, Government of India.

Research & Development Expenditure in the Private Sector— An Inter-Industry Comparison

Industry	R&D Expenditure as per cent of Sales		
	1972-73	1973-74	1974-75
Inorganic chemicals	1.29	1.56	1.37
Synthetic fibres	0.56	0.67	0.95
Heavy organic chemicals	4.69	3.58	1.87
Paper	0.28	0.18	0.14
Metallurgical industries	0.47	0.47	0.37
Industrial machinery	1.37	1.72	1.40
Electronics & electrical equipment	0.66	0.79	0.97
Cement	0.41	0.52	0.47
Drugs & pharmaceuticals	2.60	2.47	2.36
All Industries	0.95	0.95	1.09

Source : "Handbook of Research and Development Statistics 1974-75", Department of Science & Technology, Government of India.

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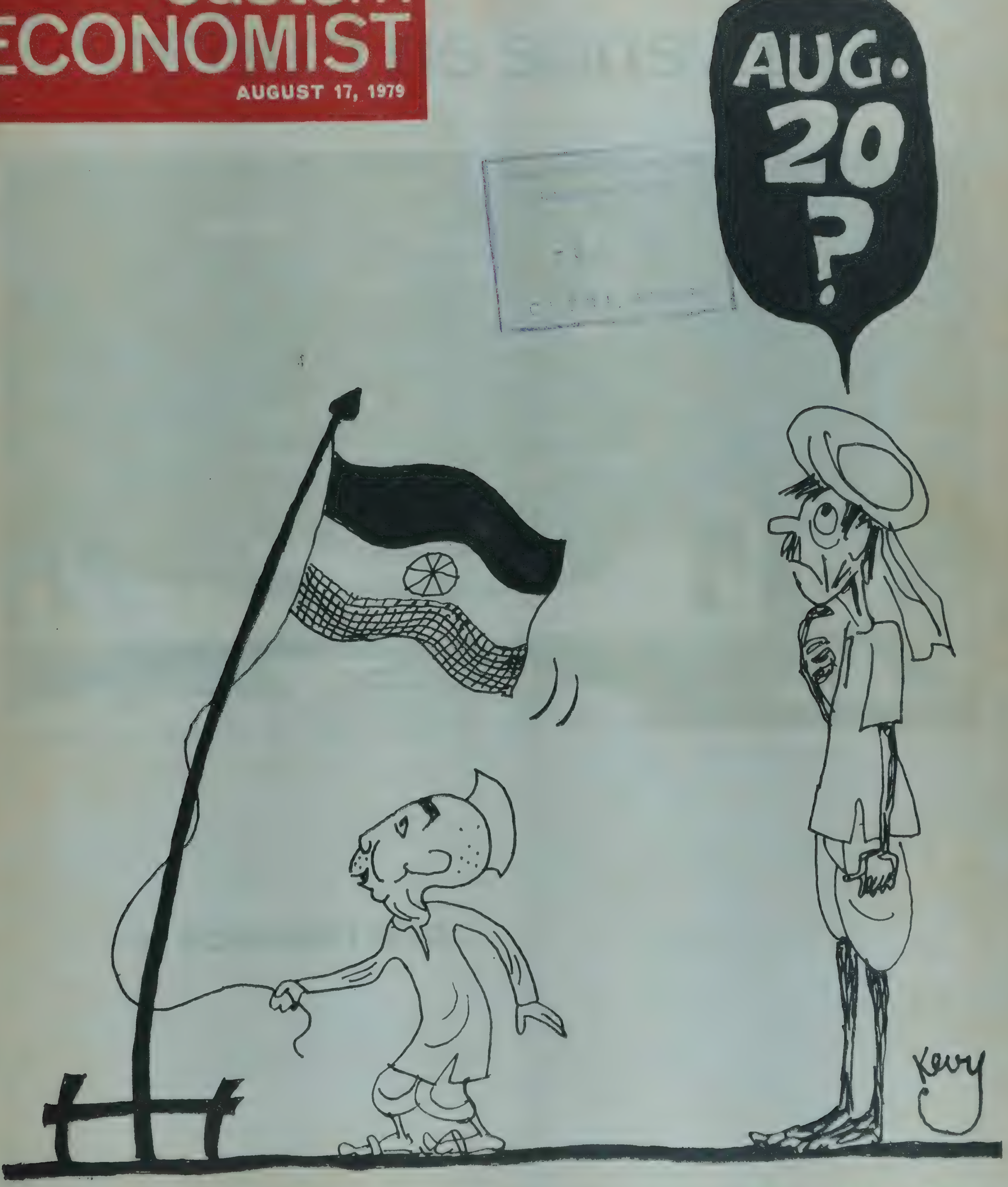

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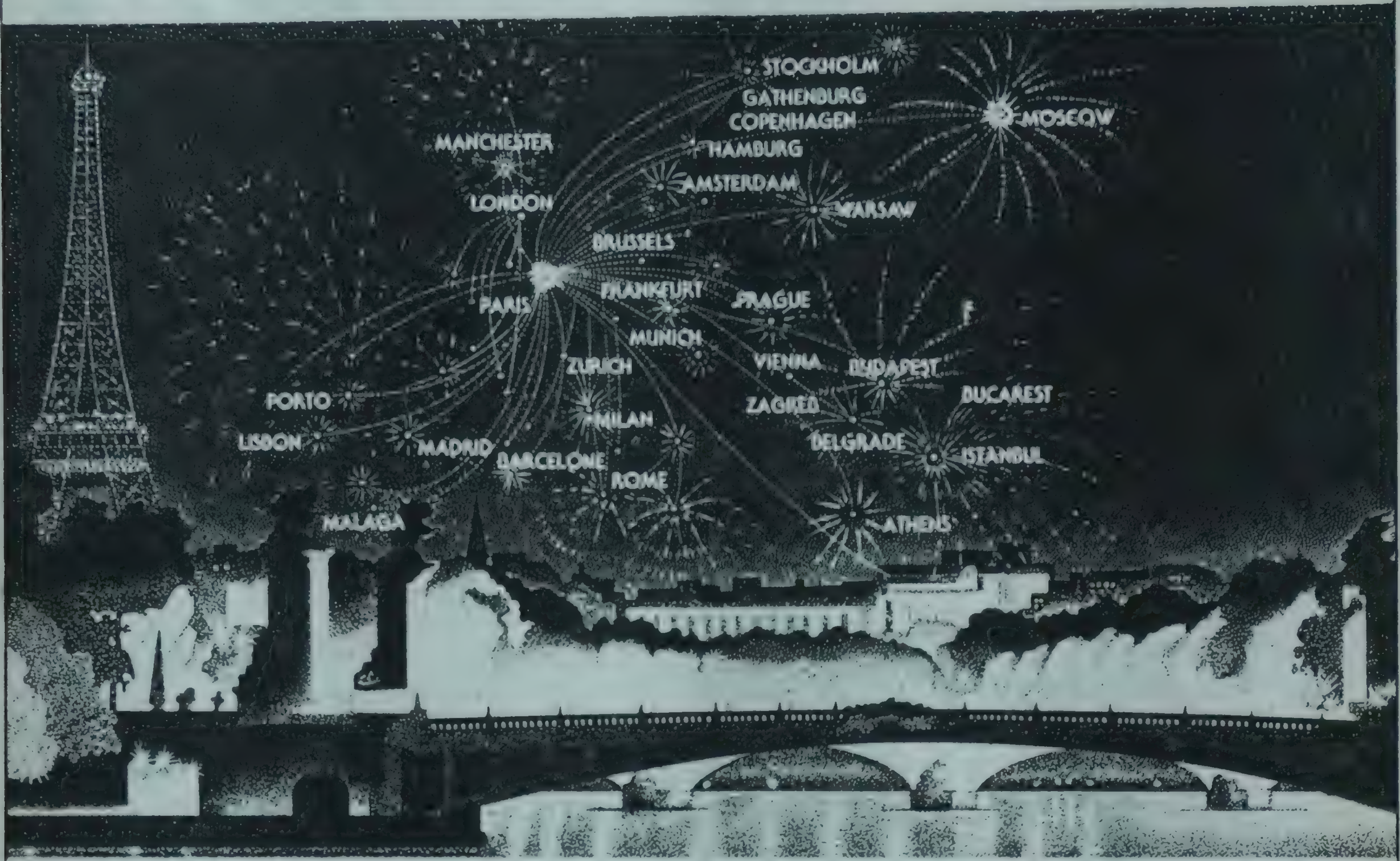
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Steel supply outlook

It is rather distressing to note that the eight per cent cut-back in coke pushings at the five integrated works of the Steel Authority of India (SAIL) during the three months to June has not yielded the desired result of building up the coal stocks at these plants to a safe level so that output could be stepped up during the subsequent nine months on a steady basis in terms of the overall target of producing 7.4 million tonnes of saleable steel from the six main plants, including TISCO, during the current financial year. The supply of coal still continues to be critical owing to sluggishness in its production as well as unsatisfactory railway movement. On August 1, the coal stocks at the five SAIL plants aggregated to just 120,000 tonnes, as against 137,000 tonnes on this day last year and the optimum level of half a million tonnes.

The widespread fears that steel output this year may significantly fall short of the target set, therefore, do not appear to be unjustified. Although there was some improvement in production last month—at 497,200 tonnes of saleable steel, it was the highest for any month this year—the cumulative output for the four months to July end (at all the six plants) at 1.862 million tonnes fell short of the 2.072 million tonnes output during the corresponding period last year by 210,000 tonnes. In terms of this year's target, the accomplishment had been of the order of only 83.5 per cent. The SAIL plants yielded during these four months 1.432 million tonnes of saleable steel, as against 1.611 million tonnes last year. They could attain the target set for them to the extent of only 81.4 per cent.

The position has been sightly better in terms of the steel ingots produced. The total production of ingots at the six integrated works during the four months to July was 2.469 million tonnes, as against 2.579 million tonnes in the corresponding period last year. The output of the SAIL units was of the order of 1.922 million tonnes, as against 1.991 million tonnes. The production of saleable pig iron at 250,000 tonnes, as against 529,000 tonnes, however, left much to be desired.

The critical situation arising out of the extremely tight supplies from the domestic sources, of course, has been eased to a considerable extent through stepping up imports. The secretary, ministry of Steel, Mines and Coal, Mr Mantosh Sondhi, pointed out last week that notwithstanding the setback to domestic output, the net availability of steel in the market during the first quarter of this year—April to June—was nearly 90,000 tonnes more than in the corresponding period last year. During the current (second) quarter, imports are expected to be around 432,500 tonnes as against 115,000 tonnes in this quarter last year. This will ensure improved availability during this quarter as well. It is planned to make available to consumers during the three months to September 2,685,500 tonnes of saleable steel—603,500 tonnes more than the quantity supplied in these months last year and 650,500 tonnes more than what was made available in the first quarter.

A close watch, it is claimed, is being kept on the import programme to ensure timely supplies in adequate quantities so that the total net availability during the whole of the current year is at least one million tonnes more than in the last year. Already the import programme has been stepped up from the original estimate of 1.5 million tonnes to 1.8 million tonnes. Some further increase in imports is not ruled out. Bulk of the imports are in the form of plates, structurals, HR coils, sheets and semis.

Particular attention, Mr Sondhi stressed, was being paid to ensuring adequate supplies to the small-scale units and power and irrigation programmes. The total supplies to the small-scale industries are proposed to be stepped up this year to 500,000 tonnes from 332,959 tonnes last year. A concerted drive has also been instituted to check diversion of steel for unauthorised purposes. During the first quarter, supplies were suspended to 114 units after inspection carried out by the regional iron and steel controllers. About 95 units were debarred from drawing further supplies during the same period. The drive is to be intensified further and more stringent penalties are proposed to be levied to check diversion to unauthorised channels and uses.

The export sector, Mr Sondhi assured, would not be starved of steel. During the three months to June, the supply against export allocation to the exporting units, he pointed out, was about 20 per cent more than in the corresponding three months last year. With a view to alleviating the shortage of pig iron, two blast furnaces—one at Bhilai and the other at Durgapur—have been recommissioned recently for producing foundry-grade pig iron.

The stepping up of the import programme undoubtedly is welcome in the interest of keeping up the production of the consumer industries. But we obviously cannot afford to indiscriminately raise the import bill which is to go up sharply this year thanks to the hike in oil prices. With a view to mitigating the impact of the insufficient supplies of coal, further imports of coking coal of the order of about a million tonnes are envisaged this year. But still an all-out effort is needed to push up domestic production.

In the interest of raising the overall output of saleable steel, the government is also said to be considering the grant of some more incentives to the mini steel plants. A working group has been set up recently, to study afresh the problems relating to this industry, especially the availability of inputs like steel scrap, graphite electrodes, refractories, etc. The group will also scrutinise the ways and means of stimulating the demand for the products made by the mini steel units.

Recently, the steel ministry had offered a major concession to the mini steel plants in the form of offloading 75 per cent of the requirements of the construction industry for bars and rods from the integrated to the mini steel plants.

As regards the inputs required by the industry, the Steel ministry sources feel that the availability of scrap should show a distinct improvement as a result of allowing larger imports as well as the ship-breaking process initiated last year.

The imports of sponge iron to be used by mini steel plants, which have already been tied up, are expected to mature soon. The first consignment from Indonesia is likely to arrive in a couple of months. Although this is purely an experimental measure, larger quantities of sponge iron may be imported to feed the mini steel sector.

The mini steel plants produced last year about two million tonnes of liquid steel, an all-time record, both in absolute terms and in terms of capacity utilisation. This year their output is envisaged to be raised considerably. Along with the measures being taken to augment the supplies of scrap and other inputs, efforts are being made to ensure better power availability.

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CDS complications

THE ORDINANCE promulgated on July 4 to defer for one year the repayments of the instalments of compulsory deposits under the additional wages deposit account and the additional dearness allowance deposit account, which fell due on July 6, 1979, will lapse on August 19—a day before the new session of parliament starts. This ordinance, along with the one empowering the government to prohibit strikes or go-slow by the Reserve Bank of India employees, could not be converted into an act of parliament during the last session as it was prematurely adjourned, and ultimately prorogued following the resignation on July 15 of the then prime minister, Mr Morarji Desai, when he found his party in a minority in Lok Sabha.

The lapsing of the CDS ordinance will make it obligatory on the part of the government to release the impounded repayments and the interest thereon. So far as the instalments due on deposits under the Compulsory Deposit Scheme (Income-tax Payers) are concerned, this will not create any complications for while issuing the above ordinance, the government had only indicated that their payments would be postponed by a year through a suitable piece of legislation before they fell due on April 1 next year. But complications have arisen in respect of the repayments deferred through the July 4 CDS ordinance.

Under this ordinance, the repayments have been compulsorily held back and interest for the period subsequent to July 6 will have to be paid and that too at the enhanced rate of 13 per cent stipulated in the ordinance. This undoubtedly will require legislative sanction which may take quite some time.

It, indeed, is regrettable that in a gesture to placate certain sections of society, particularly the leftists, a judicious decision is being allowed to lapse notwithstandiny the fact that stringent measures are being thought of to contain the money supply with the public with a view to reducing the pressure on the price-line. The above ordinance had immobilised about Rs 345 crores. The release of this sum will undoubtedly make the task of containing the money supply much more arduous. It may lead to steps which could have been avoided in the larger interests of the economy. For instance a two-point hike in the bank rate, the possibility of which is being currently talked of, no doubt will help in curtailing bank credit to some extent, but simultaneously it will foster cost-push inflation which has already received significant fillip from the stepping up of the prices of various essential industrial inputs—metals, coal, power, crude oil and petroleum products, etc. The sluggishness on the industrial front has also contributed not insignificantly to mounting costs. This trend should get accentuated as a result of tighter credit for production purposes.

Travelling dangerously

THE DECISION of the World Bank to provide funds for improving the transport system of Calcutta should be of considerable assistance in enabling the citizens to have better facilities for travel. The World Bank has been taking keen interest in developing urban transport in many countries and it is but appropriate that it should also give attention to India's largest city. Both the Calcutta State Transport Corporation and the Calcutta Tramways Carporation have been assured of funds for expanding and modernising their fleet. Negotiations with the World Bank are to be finalised shortly, but it is estimated that the Bank will give between Rs 80 and Rs 100 crores for this purpose. The proper maintenance of both forms of transport has been sadly and systematically neglected in recent years and as a result, the citizens have been undergoing tremendous hardship. Buses and trams are heavily overcrowded and the citizens have been denied one of the basic amenities for comfortable living.

deteriorating service

To what extent the performance of the Calcutta State Transport Corporation has deteriorated will be evident from the fact that its deficit increased from Rs 146.73 lakhs in 1966-67 to Rs 488.96 lakhs in 1972-73, Rs 1114.80 lakhs in 1976-77 and Rs 1295.39 lakhs in 1977-78 The fleet strength was 1,178 in 1977-78, compared to 1,226 in 1976-77 and 1,324 in 1972-73. The average number of buses outshedded daily was 574 in 1977-78, as against 608 in '1976-77, 591 in 1972-73, 689 in 1966-67 and 615 in 1961-62. In 1961-62 the average number of daily passengers carried was 10.39 lakhs, but in 1977-78 it was only 7.14 lakhs. The fleet utilisation ratio was 61.0 per cent in 1977-78 while in Bombay and Delhi it was 86.03 per cent and 76.44 per cent, respectively. The working of the tramways has also been unsatisfactory in many respects. The daily outshedding rate is now of the order of 270 compared to 350 a few years ago. About 50 trams are over half a century old. At least 58 trams have now to be replaced and many are in need of urgent repair.

In these circumstances, the availability of financial assistance from the World Bank is, indeed, most welcome. So far as the trams are concerned, the development schemes are estimated to cost about Rs 41 crores. These include purchase of new trams, import of essential spare parts, renovation of track, replacement of overhead network, and improvement of workshops and depots. The programme of the Calcutta State Transport Corporation also envisages substantial expansion of its fleet and construction of new depots and workshops.

Even if the World Bank readily agrees to provide all the necessary assistance and advice, how far will the government of West Bengal be able to utilise them speedily and effectively ? If the transport system has become chaotic, it is not so much due to the lack of rupee resources or foreign exchange but mainly because of the downright inefficiency of the departments concerned. A few years ago, the government had appointed a committee, headed by Dr N. Das, to enquire into the working of the Calcutta State Transport Corporation. It had made shocking disclosures about the corruption and various kinds of malpractices and had also made many recommendations for improving the corporation's viability. But the government has been unable or unwilling to enforce them.

Inter-union rivalry seems to be one of the major causes for the inability of the government to reform the corporation. Indiscipline and absenteeism continue to be rampant. Political interference with the working of the transport system has also contributed to the present situation. In the past, buses and trams were deliberately damaged and even burnt during political agitations, but there was hardly any public indignation against such wanton acts of vandalism. Nor did the government take deterrent action against those who had indulged in them.

awful roads

The awful conditions of Calcutta's roads are another reason for the deterioration of the transport system. The United Front government has undertaken a programme of road repairs, but generally the work is done in an indifferent manner. As a result, roads which were repaired only a few weeks ago are again in need of repair. There is utter lack of coordination among the different agencies like the Calcutta Corporation, Calcutta Metropolitan Development Corporation, Calcutta Electricity Supply Corporation, and the department of Telephones. All of them dig the roads indiscriminately. But it is nobody's responsibility to see that such roads are promptly and properly covered up. Students of history are familiar with the black hole of Calcutta. Now the city has become notorious for its potholes. They not only cause immense damage to all kinds of vehicles but also endanger the safety of pedestrians.

These potholes have become wider and deeper, but there seems to be no plan to repair them and prevent their recurrence.

Unless therefore the state government sheds its lethargy towards civic affairs and ensures some discipline in the working of the corporations concerned, Calcutta's citizens will continue to travel dangerously in trams and buses even with the availability of generous assistance from the World Bank.

Wagons as warehouses

THE GOVERNMENT of West Bengal recently decided to confiscate the goods and packages which were left uncleared in the railway wagons and sheds after seven days of their arrival. This step was taken because the government found that a section of traders was deliberately delaying the clearance of goods with a view to creating scarcity and high prices. The traders were reported to have used the wagons as warehouses and they did not mind paying the penalty for non-clearance since they could make it up in due course by charging higher prices. The confiscation is to be confined to 26 stations on the south-eastern railway, to begin with, and later extended to the stations on the eastern and the north-eastern railways. The government had on many occasions appealed to the trade to arrange for prompt clearance but the response was disappointing. The prices of many essential commodities in West Bengal have been showing a rising trend and there have also been reports of shortages. In this situation, the government had no alternative but to resort to drastic measures.

It seems rather strange that the trade associations in West Bengal did not use their influence with businessmen to stop the practice of delaying the clearance of their consignments and thereby contributing to scarcity and rise in prices. These associations are supposed to exercise some discipline on their members especially at a time when the price level in the country has been showing a sharply rising trend. West Bengal, in particular, has to depend on other states for getting its requirements of several commodities like sugar, salt, mustard oil, paper and pulses. With the approach of the festival season, there is every likelihood of scarcities being intensified with their inevitable impact on the price situation. The state government's action, therefore, seems justified, but the railways have also to ensure that conditions are not created which will contribute to the congestion in the stations.

When the Rail Tariff Enquiry Committee, headed by Dr. H.K. Paranjape, came to Calcutta in July this year, the representatives of the chambers of commerce and other business organisations drew its attention to the unsatisfactory working of the railways in many respects. It was pointed out that the facilities provided by the railways were inadequate and that, as a result, industries had to resort increasingly to road transport. Moreover, the incidence of thefts and pilferages was rising, while the freight rates on many commodities were excessive.

The committee was also told about the several anomalies in the freight structure. For example, paper and its main raw material, bamboo, were placed in the same classification. Another point raised related to the prompt settlement of claims.

settling claims

The then Railway minister, Mr Madhu Dandavate, said while presenting the budget for 1979-80 that the average time taken for the settlement of claims in the first seven months of the last financial year had come down to 37 days from 46 days in the previous year. Besides, in the first six months of 1978-79, the number of claim cases, pending for three months or more, had been reduced to 4,760 from 6,254 in the previous year. Even so, there is an urgent need as well as immense scope for settling the claims more expeditiously. Incidentally, it is interesting to recall that in 1977-78 the railways received from all over the country 396,230 claims against 377,129 in the preceding year and the amount of compensation paid was Rs 14.24 crores, against Rs 13.56 crores. The amount of compensation paid in 1977-78 in respect of some commodities was as follows (Rs lakhs): grains and pulses 239.65, coal and coke 165.34, sugar 67.72, iron and steel 111.71, oilseeds 54.30, piecegoods 65.08, tea 42.97, spices 26.61, and vegetable and other edible oils 33.48.

In the context of emerging shortages and high prices, the railways have a special responsibility to ensure swift and safe movement of goods. The business community has also a duty to offer its full cooperation to the railways. West Bengal's decision to deal sternly with the traders who create and exploit scarcity conditions should have a salutary effect in rousing public opinion against the various kinds of malpractices which are likely to aggravate the inflationary situation. Meanwhile, the government of India should take the necessary steps to improve the working of the banks and implement the credit policy with caution so that industry and trade are not handicapped due to the paucity of funds.

Bungling in rubber

THE OUTPUT of natural rubber has disclosed an uneven trend since the peak was reached at 1.50 lakh tonnes in 1976-77. In earlier years a steady increase in indigenous production of this plantation product was in evidence and there was no shortage of raw materials for the manufacturers of tyres and other products as synthetic and reclaimed rubber also were available in the required volume. The bumper 1976-77 crop even gave rise to problems of marketing and support operations had to be carried out by the State Trading Corporation for preventing an undue decline in prices. There had even to be limited exports by subsidising losses as world prices were below internal parity.

The situation is now vastly different. In the past 12 months rubber prices have risen by over 25 per cent. The output of rubber estates declined to 1.47 lakh tonnes in 1977-78 and further to 1.34 lakh tonnes in 1978-79. The loss of production in the last season was due mainly to labour trouble though unfavourable weather conditions also affected the operations of the estates.

The consumption of rubber for various purposes on the other hand increased by 13.7 per cent to 1.82 lakh tonnes. With pronounced depletion of stocks it became necessary to import 30,000 tonnes in 1978-79. There was at first considerable opposition from the Indian Rubber Board and representatives of the small growers to the decision of the central government to import limited quantities. As the Kerala government too stated that the interests of the growers would be prejudicially affected, the arrangements for importing rubber were delayed. It eventually became clear that there was imbalance between demand and supply and imports would have to be permitted as the output of synthetic rubber also could not be raised because of shortage of coal.

deficit apprehended

Even with an estimated increase in the production of natural rubber to 1.50 lakh tonnes in 1979-80 and in that of synthetic rubber to 30,000 tonnes it is apprehended that there will be a deficit of 45,000 tonnes. The tyre industry has been stepping up its output significantly in the past two years with a brisk demand from road transport operators and increasing output of tractors, two-wheelers and other vehicles. The use of rubber for other purposes also has tended to rise with higher cost of imported synthetic rubber and substitutes. It has been expected that rubber prices will be maintained around Rs 1000 per quintal and manufacturing cost will not increase unduly. The anticipations in this regard have gone awry with bungling by the State Trading Corporation in handling imports and releasing them to the consumers without delay and at reasonable prices.

As the Kerala government was keen that there should not be an undue decline in the open market prices it was agreed that imports of 15,000 tonnes should be arranged by the State Trading Corporation for use in the lean months between April and September. It was also agreed that actual consumers should be permitted to import directly another 15,000 tonnes during the same period. The balance of 15,000 tonnes was to be secured earlier in 1980. With a drop in arrivals into marketing centres in Kerala on account of very heavy rainfall in the growing areas and a sharp decline in stocks held by manufacturers, due to the delay in releases of imported rubber by the STC, the trade has rigged up the price in the past few weeks by Rs 150 per quintal for RMA lot, and the release of rubber by State Trading Corporation has been effected after the rise in prices on a basis which has nearly confirmed the existing price level. The manufacturers of tyres hoped that the STC would not effect sales in an arbitrary manner and secure large profits. Either because of a desire to recoup partly the losses sustained on earlier export sales or prevent malpractices by trade or consumers the STC has made a substantial profit on its recent imports. It has however, been asserted that subsequent purchases have been costly with the rise in world prices and no impact can be made on the internal price structure unless there are heavy arrivals after October and actual production in 1979-80 is in excess of estimates.

The main consumers are sore that they have not been allowed to import their requirements against quota allotted for them on a cheaper basis because of the delay in issuing the letters of authority. It would now appear that high prices for rubber will be in evidence unless there is an unexpected increase in indigenous production. With the latest reports from world markets that natural rubber will regain its earlier pre-eminence on account of costlier synthetic rubber, it is speculated that world prices will remain in high levels and large sums will have to be spent on imports if the deficit cannot be made good with higher output of the rubber estates and the synthetic rubber plant. The shortage now works out to over 20 per cent of total consumption. With ample scope for increasing indigenous production of natural rubber and raising output of synthetic rubber with plentiful availability of industrial alcohol, there is no excuse for dependence on imports. Apart from reestablishing the earlier growth rate of 5 to 7 per cent

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IN THE NATION 313-318
Steel Supply Outlook
CDS Complications
Travelling Dangerously
Wagons as Warehouses
Bungling in Rubber
Tardy Electrification of Rail Track
WINDOW ON THE WORLD 321-326
Oil Price Hike Limits Growth
Penetrating Japanese Market
Recovery in Austrian Economy
Venezula's Stabilization Plan
MOVING FINGER 327
COVER FEATURE 328
The Tasks Ahead
INDEPENDENCE DAY FEATURE
Revised Minimum Needs Programme —*Dr. J. D. Sethi* 332
Boosting National Productivity: An Action Plan—*M. Krishnamoorthy* 336
Powering Village Growth 339
Role of Technology in Economic Development 340
Technology Assessment for Social Change—*P. K. Kohli* 342
POINT OF VIEW
A New Head at the Fed—*Sudhir Sen* 350
Small-Scale Sector: Barriers to Growth—*Subhash J. Rele* 353
Credit Management on a Model Dairy Farm—*Amrik S. Saini, Raj Vir Singh & R. K. Patel* 356
TRADE WINDS 363
COMPANY AFFAIRS 368
RECORDS & STATISTICS 376
ICICI's Study on Corporate Sector

annually in respect of natural rubber with the higher productivity of the estates there will also have to be a large scale replantation programme. The area under rubber too will have to be extended in Kerala, Tamil Nadu and Andhra Pradesh. New capacity will have to be created for augmenting output of synthetic rubber. It thus has become imperative to proceed on the basis of defined targets for the next five years.

Tardy electrification of rail track

THE OPERATION of suburban trains on the small stretch of electrified track between Madras Central and Tiruvottiyur and Madras Beach stations for facilitating the travel of commuters to and from the industrial area is a painful reminder of the awfully slow progress recorded in respect of electrification of sections of the Southern Railway. The Vijayawada-Madras link ought to have been electrified a long time back as the scheme was sanctioned more than a decade ago. Yet on the plea of paucity of resources, due to the accordance of lower priority at particular stages, complete electrification of this stretch of about 300 kilometers is not likely to be achieved before 1981. Only a small segment between Madras and Gummudipundi is now being operated by electricity. Even though work is progressing also from the Vijayawada end there has been inordinate delay and the question may well be asked why there has been no sense of urgency and determined perspective planning. On the southern side too electrification is contemplated only up to Trivellore which can be called an industrial suburb of Madras and it is indeed a pity that even this project should be completed in two stages.

The meter gauge electrification upto Villupuram from Madras was however completed expeditiously when it was decided that the early stretch of D.C. traction between Madras Beach and Tambaram commissioned nearly half a century ago, should be converted into A.C. traction. The distance of over 160 kilometeres of electrified track has been helpful in saving consumption of coal as electric locomotives are used for hauling also long distance passenger and freight trains. But the subsequent development of track and signalling facilities has not been carried out imaginatively and the congestion of traffic is so serious that any further increase in passenger and freight traffic can be handled only if there is double line construction upto Villupuram. Indeed, it has been demanded that there should be complete electrification of the track upto Tiruchirapalli in the first stage and subsequently upto Quilon. These proposals will of course have to be modified in the light of new schemes for converting meter gauge sections into broad gauge.

While the problems of the meter gauge system are peculiar and difficult, on the broad gauge sections south and west of Madras the volume of traffic is increasing at an alarming rate and no serious thought has been given to the creation of additional track capacity and electrification of longer sections for suburban traffic and whole routes for long distance traffic.

main preoccupation

The main pre-occupation is now over electrification of small stretches though by some earlier 'mistake' the Vijayawada-Madras section will have complete electrification in the next two years. The Vijayawada-Tenali stretch may become operational shortly while 70 per cent of work has been completed in the remaining sections. The construction of the new suburban terminal in Madras also will relieve pressure on Madras Central and it will be possible to segregate suburban services from main line services.

It has, however, been overlooked that the full benefit out of electrification will not accrue unless there were four tracks between important points, say between Madras and Nellore, Madras and Renigunta and Madras and Jolarpet. Only the laying of third line between Villivakkam and Tiruvellore and between Korukupet and Ennore is contemplated at a cost of Rs 36 crores. The facilities between Madras Beach and Guindy are also to be modernised and strengthened at the cost of Rs 9.25 crores. These programmes along with the new suburban terminal, provide indication of new thinking and focus attention on the magnitude of suburban traffic problems. An increase in the volume of suburban traffic will undoubtedly relieve pressure on the road transport systems and facilitate reduction in the consumption of petroleum products.

sense of urgency

But the question of according high priority to electrification of long sections in coal deficit areas at a time when the cost of fuel is rising abnormally should be tackled with a sense of urgency. The new developments on the power front in the southern region augur well for intensive railway electrification. While every efforts should be made to complete electrification of the Madras-Vijayawada section, there will have to be early decision on the electrification of the broad gauge route to Trivandrum and Bangalore. It has been estimated that an expenditure of Rs 150 crores can facilitate electrification of 1500 kilometers of existing track besides enabling also the preparation of further long stretches for future elecrification. It is high time reasonably large sized plans are formulated for electrification of railway system in coal deficit areas.

Any attempt to have dieselisation before electrification in the changing situation will result in wasteful expenditure in foreign exchange on the consumption of diesel oil. The earlier theory that traffic densities will build up only over stages and electrification should be resorted to only in the final phase is no longer valid. Apart from the inordinate increase in the cost of petroleum products, electric locomotives are capable of handling longer passenger and freight trains and it has been forcefully pointed out that the cost of operation will be much less in traffic density areas and the return will be even 20 per cent on outlay where a high operating ratio is achieved. It is only to be hoped that the new lead now provided by suburban electrification of broadgauge system in the Southern Railway will trigger bolder thinking and long distance routes will be taken up before long for similar handling.

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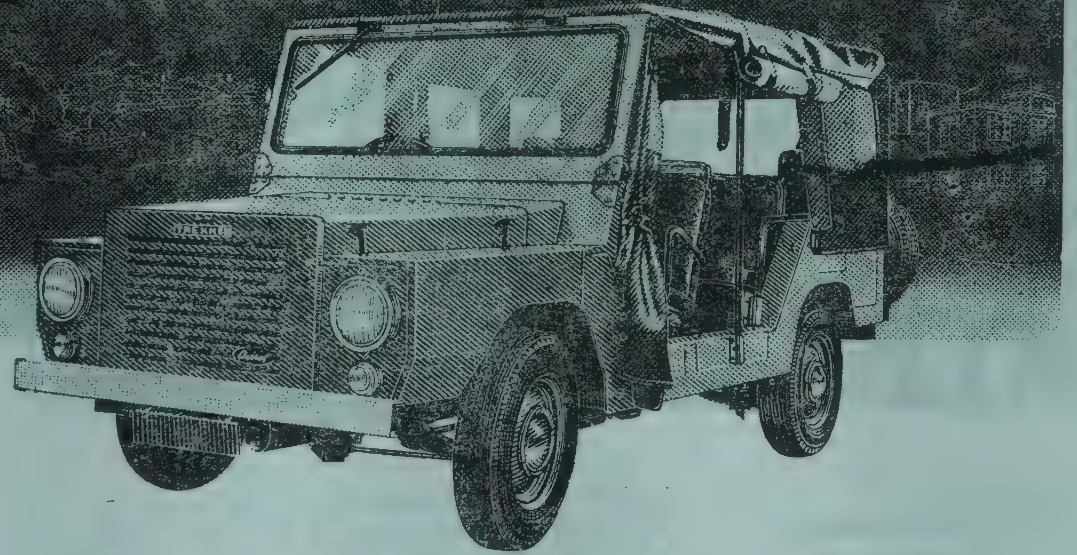

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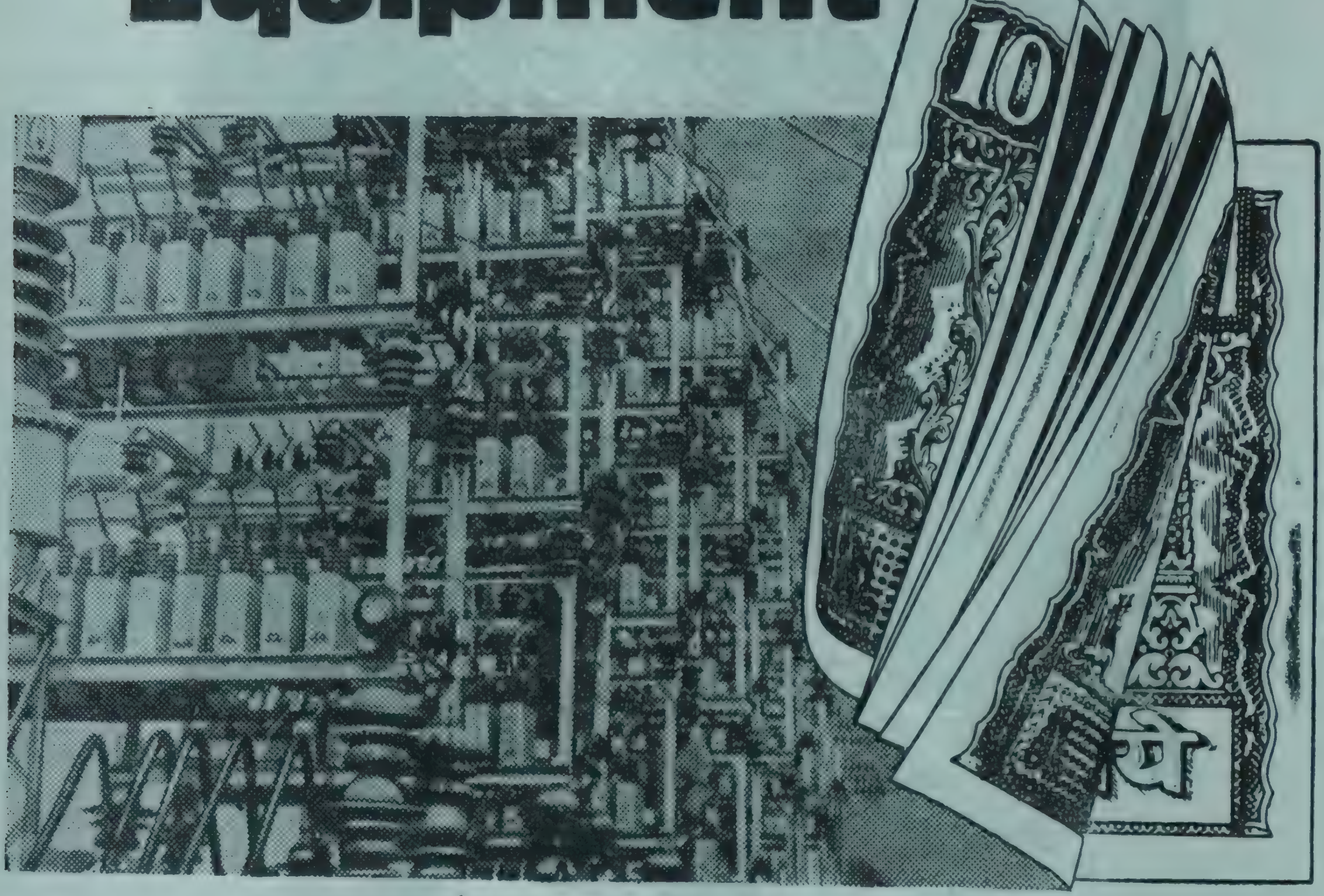

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Oil price hike limits growth

AN ECONOMETRIC analysis done by the US state department has revealed that the recent oil price increases, imposed by the Organization of Petroleum Exporting Countries (OPEC) during a period of relative economic stagnation, will seriously limit growth prospects in most industrial nations.

The analysis, however, suggests that appropriate fiscal policies, when introduced simultaneously by several major industrial countries, can partially offset the adverse effects of higher oil prices on growth rates without substantially worsening inflation.

The study, titled "The Impact of Higher Oil Prices on OECD (Organization for Economic Cooperation and Development) Economies" estimates that annual real growth in member nations will decline from 2.8 per cent to 1.6 per cent in 1979, while inflation will increase from an annual rate of 8.3 per cent to 9.2 per cent. It sees real growth in 1980 declining from 2.7 per cent to 2.1 per cent as a result of higher oil prices, and inflation rising from 7.2 per cent to 7.8 per cent.

The study is based on two simulations a control model in which real oil prices in 1979 and 1980 remain constant with respect to OECD prices (increasing at about ten per cent a year) and a second scenario in which 1979 oil prices reflect the latest OPEC increases (a 40 per cent rise to a 1979 price of about 18 dollars per barrel) and with 1980 prices rising at about the same rate as OECD prices (10 per cent).

Under these assumptions, the effects of oil price increases vary among countries. But with the exception of Canada, the larger OECD economies lose more than one per cent in real growth in 1979. For example, real gross national product (GNP) in France drops from 3.3 per cent to 1.9 per cent; in West Germany from 3.3 per cent to 1.2 per cent; in Italy from 3.4 per cent to 1.6 per cent; in Japan from five per cent to 3.7 per cent; in the United Kingdom from two per cent to 0.8 per cent and in the United States from 2.1 per cent to 0.9 per cent.

The differential impact of the two models narrows in 1980. Nevertheless, the 1980 OECD growth is still 0.6 per cent lower and the inflation rate 0.6 per cent higher than it would be without higher oil prices. If the real oil price should rise again in 1980, the study warns, the growth and inflation effects will be greater.

The impact study further indicates that in 1980 recovery of growth rates to what they would have been in the absence of the latest OPEC price increase would be almost complete in West Germany and quite substantial in the United Kingdom. However, recovery in the United States would lag, with the US growth rate 1.2 per cent below the control model in 1979 and still 0.9 per cent below in 1980.

As a result of higher oil prices, trade deficits rise and trade surpluses fall in all OECD countries. This would promote adjustment in the cases of West Germany and Japan, which have enjoyed large trade surpluses in recent years, but trade imbalances would be aggravated by the substantial increase in the US deficit.

For example, West Germany's 1979 trade surplus would decline from 18,200 million Deutsche-marks under the control model scenario to 13,500 million under the latest OPEC increase, and from 22,100 million to 17,300 DMs in 1980. Japan's trade surplus also drops, from 23,600,000 million yen to 11,000,000 million yen in 1979 and from 21,000,000 million to 6,500,000 million yen in 1980. By contrast, the US trade deficit increases from 30,400 million dollars under the control model to 45,000 million dollars in

1979 and from 31,400 million to 51,000 million dollars in 1980.

The oil price increases raise unemployment in both 1979 and 1980 in every OECD country. Furthermore, despite some recovery in growth rates, the increases in unemployment rates are larger in 1980 than in 1979, with US unemployment reaching 8.2 per cent in 1980.

Penetrating Japanese market

It is now widely believed in Japan that the country has finally come out of the prolonged business slump created by the oil crisis. Economic indicators have shown improvement in recent months. Industrial corporations are now generally reporting improved profits for the current accounting period. The capacity utilization in the manufacturing sector has gradually risen over the past few months. Increased governmental spending on public works to stimulate the economy has finally shown visible effect, while personal consumption and private capital investments have looked up.

In 1976, growth was sustained by a major increase in exports. In 1977, government spending led the growth, followed by exports. Last year, exports became a negative factor and government spending continued to be the prime booster, while private demand also made an important contribution. Now, it seems, the economy is gradually entering a phase of autonomous recovery, relying more on the expansion of private demand, reducing dependence on public expenditure and exports.

It is felt, however, that this recovery, led by private demand, will progress slowly because increasing instability in oil supply and energy prices, caused by the recent developments in west Asia, have rekindled the fears about inflation, and the oil shortage has enhanced uncertainty in the minds of businessmen and policy-makers. Moreover, there still are a number of industries suffering from structural adjustment. They are placed under the pressure of extensive changes in demand structure. Among them are not a few basic industries which carry important weights in the Japanese industry, Unless stability is regained in these industries, real vigour may not come back to capital investments in the manufacturing sector.

Also it must be pointed out that in this process of adjustment, the employment, situation is continuing to deteriorate. For the next five to six years, a growth rate of 5 to 6 per cent or so is considered to be desirable if Japan is to assure stable employment and smoother transformation of the industrial structure.

Given the magnitude of the present demand-capacity gap, public finance still has a large role to play in sustaining the level of economic activities. In order to restore stability and vigour to the economy and lay foundations for self-sustained growth, however, private industry is likely to work actively on its own towards solving various problems with structural roots.

While there is a sustained growth of the economy, making Japan attractive for those interested in selling goods in that country, *Keidanren Review*, published from Tokyo, in a recent issue has pointed out that there are many hurdles such as language, different business practices, consumer tastes, needs of users and different distribution systems. Only those who have enough courage, time and energy can jump over these hurdles.

To be successful on the Japanese market, one has to have strong and continuous interest in it. One must also choose an appropriate marketing channel and formulate a long-term marketing strategy which usually entails an initial investment that may not yield returns quickly. Establishing of close personal contacts is another important prerequisite in the Japanese market. The consensus decision-making system increases the need for personal contacts in carrying out business deals.

Above all, one must possess a high degree of flexibility and adaptability. One should be prepared to modify and improve one's products and introduce new products, whenever necessary. Otherwise, competitors would take business away.

Recovery in Austrian economy

The Austrian economy has improved substantially during the last decade. In several spheres the structure of production and exports has caught up with the highly developed industrial nations. The main cause for this process of recovery is traceable to an above-average propensity to save and invest, as well as a successful incomes policy. An expansion and modernization of capital stock in industry, which led to technological revolution,

Eastern Economist 30 Years Ago

AUGUST 19, 1949

How slowly Government machinery moves and fails to respond to the changing conditions in the world market in time is illustrated by the administration of control over the exports of oils and oilseeds. Relaxation of those controls came rather too late after protracted correspondence between the trade and the Government at a time when conditions in the international market underwent a considerable change owing to a slump in U.S. prices. World production of fats and oils in 1948 registered a substantial increase above 1947, and although it is below the pre-war by a margin of 2 million tons the sellers market has now positively yielded place to the buyers market. Indian prices are unable to adjust themselves to the Continental levels and are higher by about £18 in the case of the groundnut oil and by £7 in the case of groundnuts. The chief reason for the high Indian prices during the year ended April 30, 1949, according to the Madras Oil and Seeds Association was the short crops during two consecutive years. The prospect for the new crop, however, is bright owing to favourable rains. While seasonal fluctuations in the crop are beyond control, earnest attention must be given to bringing Indian prices in line with international prices. Two remedies yet remain to be tackled—stepping up production and relief in the sales tax on exports. In this connection it is pointed out that even countries more favourably situated than India in the matter of trade balance have exempted articles of export from direct internal taxation. The anomaly of export control in the midst of a fast approaching buyers market is too obvious and the President of the Association has pleaded for its removal in respect of groundnut oil and lineseed oil, particularly in view of a large crop in the new season.

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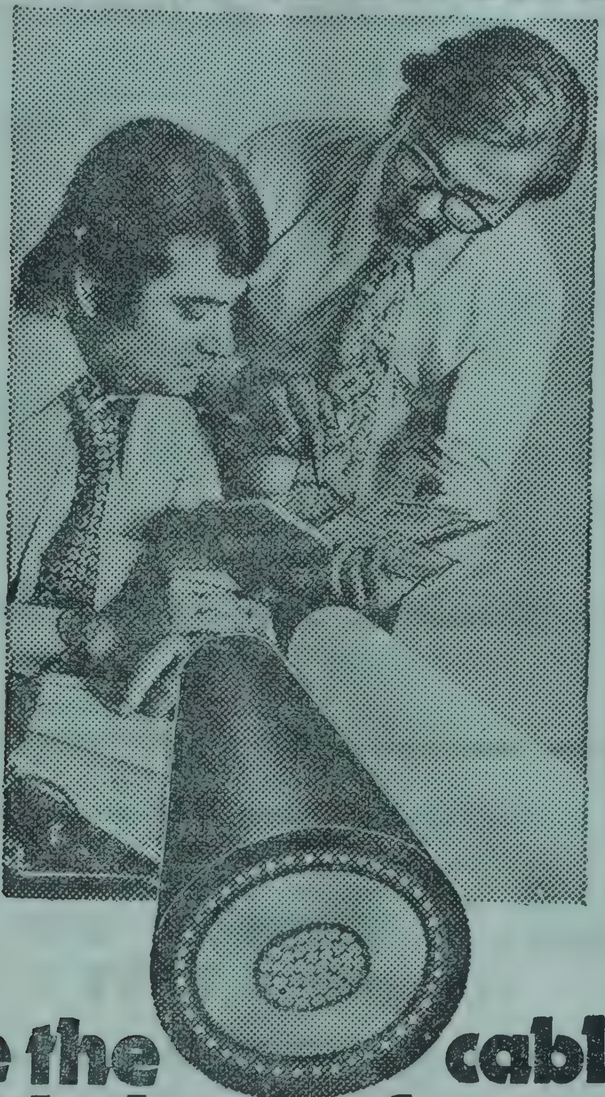

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has also made a vital contribution to the growth of the Austrian economy. The decisive breakthrough in real capital formation occurred during the last decade.

Austria has been able to achieve a high level of employment while maintaining an impressive level of productivity. Total productivity during 1960-78 increased in Austria by 115 per cent (4.3 per cent per annum) while the increase was 104 per cent in West Germany during the same period (4.0), 94 per cent (3.7) in the EEC and 77 per cent (3.2) in the OECD as a whole.

interesting conclusions

The comparison of some aspects of the Austrian economy with that of West Germany leads to some interesting conclusions. Nominal labour costs per unit of production increased in Austria from 1960 to 1970 by 1.4 times; by 1975 by 3.2 times; and by 1978 by 4.3 times. During the same time spans, they multiplied in West Germany by 1.7 times (1960), 3.6 (1975) and 4.7 (1978). The relative position of Austria vis-a-vis West Germany had actually improved by 20 per cent in 1970. This cost advantage was whittled down to 12 per cent in 1975 and to nine per cent by 1978, but was nevertheless still prevalent. With regard to the EEC as a whole, the nominal cost advantage of 41 per cent in 1960 was reduced to 11 per cent in 1978 due to the drastic devaluation of several European currencies.

If the real capital formation is divided into an older (1960 to 1969) and more recent phase (1970 to 1976), it becomes evident that the renewal of capital stock in Austria was much faster, and happened with greater intensity, than in some other countries. For example, the average real investment volume per capita during the period 1970 to 1976 was 56 per cent higher when compared with the 60's. In West Germany this increase amounted to 27 per cent, in the EEC to 21 per cent and in the OECD as a whole to 32 per cent.

Measured in the ratios between research intensive industrial goods and overall industrial exports, Austria, among the 15 industrialised nations, has moved up from eleventh place to eighth, surpassing France, Italy and Canada. Only seven industrial pioneering countries are ahead of Austria; the US, Switzerland, Holland, West Germany, Denmark, Britain and Sweden.

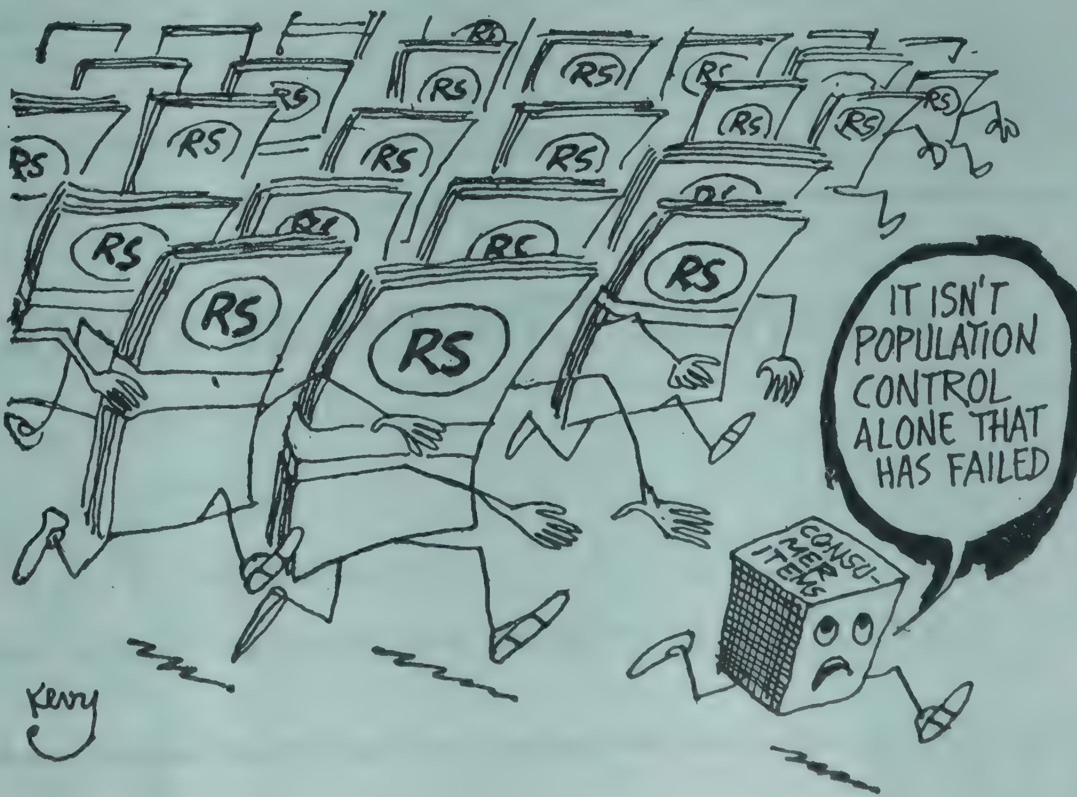
Another perspective is provided by the relative net exports of high-technology goods. According to this yardstick, Austria has moved up from number 12 to number 10 position—ahead of Denmark, Belgium, Canada and Norway. For example, the per capita export rate of chemical products, when compared to the giant chemical industry of West Germany, has increased from 28 per cent in 1960 to 45 per cent in 1977. Compared to the EEC, the improvement was from 40 per cent to 62 per cent and compared to the OECD from 49 per cent to 80 per cent. In other words, Austrian industry has helped the country to achieve a definite upsurge in the economy in the last 15 to 20 years.

Venezuela's stabilization plan

THE NEW Christian Democratic government in Venezuela has adopted recently a two-year economic stabilization plan, under which the growth in the Gross Domestic Product (GDP), excluding oil and iron exports, will be maintained at a level of five per cent this year and six per cent in 1980, as against an average of nine per cent for the 1974-78 period. Expansion has been planned only for 1981 and will thereafter be controlled. The move to impose austerity and fiscal discipline on a nation used to to quick-spending administration of former president Carlos Andres Perez has been proposed to reduce deficits in the budget and balance of payments to cut the large public debt, and to curb inflation, according to Planning minister, Dr Ricardo Mertinez.

Venezuela's oil income, which tripled to $9,200 million in 1974, had encouraged major expansion of Venezuela's non-oil industry which was far too ambitious for the country's financial and human resources. By 1978, Venezuela's global balance of payments deficit had risen to $1,700 million a figure expected to be doubled this year, while public debt had gone up to $11,700 million. Two-thirds of the public debt was foreign.

President Luis Herrera Campins came to office in March this year. He assured his country in his first address to the nation that he would solve the "economic troubles" created by the out-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going administration. He stated that the previous regime had mortgaged the country. Since then, however, he has been feeling helpless in a country used to the high-spending methods.

The new Christian Democrat government's complaints about the previous administration have focused on its free-spending ways. Despite unparalleled oil revenues, which gave the previous regime around $10,000 million annually during its five-year term, public debt rose rapidly. The Herrera government claimed that there was also a floating debt of an additional $4,680 million with spending on imports outpacing limited oil exports. Venezuela's balance of payments went into deficit by $3,000 million last year.

For the first four months after taking office, president Luis Herrera Campins virtually suspended government payments which affected liquidity strongly and provoked warnings of recession. Finally, in July, Finance minister Luis Ugueto came up with the first major piece of economic legislation, which asked for more than $3,000 million in additional credits to cover deficiencies in the 1979 budget of $10,700 million. The credits, a third of which would be financed by increases in petroleum revenues as a result of oil price rises, and the remainder through foreign borrowing, was expected to inject enough liquidity into the economy to avert any danger of recession, Dr Ugueto stated.

The request for additional funds ran into trouble recently when the Action Democratic Party, which holds a slight voting edge in both houses, conditioned approval to fuller information on how the money would be spent. This means that passage of the bill would have to be held over until Congress reconvenes in October. Despite the current high public debt, requiring servicing charges of $4,600 million between 1981 and 1983 for foreign debt alone, government economic planners believe that foreign borrowing will be necessary this year and next to cover deficits in normal growth in fiscal spending and ordinary income.

The increases since the beginning of the year in oil prices are expected to raise the oil income by 25 per cent compared with the previously estimated 10 per cent rise, thus reducing borrowing requirements. The government also hopes to stabilise imports, which increased from $2,600 million in 1973 to $10,700 million in 1978 but balance of payments deficits would continue. Under the recently announced stabilisation plan the government has established ceilings on inflation at 10 to 12 per cent and reduction of the current account deficit from the present equivalent of 53 per cent over exports to 25 per cent by 1981. Once the government has achieved stabilisation, it would be prepared to undertake expansion of the economy, though it would avoid the dimensions of the previous administration's development plans. In outlining priorities for Venezuela's sixth national development plan (1981-85), it had also been pointed out that the government would seek more rational fiscal spending policies.

Labour cost highest in West Germany

Cologne: For the first time, labour costs in the Federal Republic of Germany have exceeded the mark of DM 20 (Rs. 87.00) per hour. West Germany has the highest labour costs amongst the six most industrialised countries of the western world. At the same time, the gap between West Germany and its main competitors on the world market like the USA, the UK and Italy has further widened. The gap in labour costs was reduced only in comparison to Japan and France. "The following are the main reasons for the increase in labour costs:

- Increase of the social services to an additional 69 per cent of each 100 DM earned by a West German worker.
- Substantial increase in the rate of exchange as compared to the other industrialised countries.
- Contrary to the past, the increase in the exchange rate of the DM was not fully balanced by the rate of inflation in the other countries.

The following are the labour costs per hour in the 'big six':

1.	West Germany	DM 20.06	4.	Italy	DM 13.72
2.	USA	DM 16.99	5.	Japan	DM 12.15
3.	France	DM 14.07	6.	UK	DM 8.82

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The Republic of India has always kept its presidents in luxury. There is therefore no harm in its occasionally trying to make Rashtrapati Bhavan earn its keep. The recent dramatic developments in the political situation therefore at least had the merit of making Mr Sanjiva Reddy do a spot of work. Not that he would have grudged this. Those who know him, whether a lot or only a little, must also know that he likes nothing better than hearing his own voice. The political crisis following the dismemberment of the Janata party gave him a lifetime chance of lecturing every principal politician, haughty or not so haughty, with the exception of Mr Morarji Desai—and he predictably took full advantage of it. Mr Y.B. Chavan seems to have been one of the major sufferers, but he may well be feeling that the ordeal was ultimately worth it. After all he has never before been even number two, despite all the donkey's years he has been in national politics.

Mr Reddy has been suspected in some quarters and even accused of itching to do a King Magnus. He need not bother to deny. After all we have it on the authority of Mr Charan Singh that every politician nurses the ambition of becoming prime minister and that to pretend otherwise would be hypocrisy. Mr Sanjiva Reddy is nothing if not a politician—and a restless one at that—and we have it on record that he prides himself on being a simple *kisan* of the common or the garden variety and is contemptuous of the claims and pretensions of those who parade themselves as kisan leaders and have rallies staged for their greater glory. Whether president or prime minister, a politician will always be a politician and, in fairness to presidents and politicians, we must concede that in every one of us there is a politician clamouring to be let out. Scratch the skin and you run the risk of scalping the inner man.

That is why I connot agree with Mr H.R. Khanna that even a life of judicial isolation must necessarily make one unfit for an excursion into the rough and tumble of political life. After all Mr Mohammad Hidayatullah (ex-chief justice of the Supreme Court) has found it so childishly simple to jump at the directly political job of vice-president. The problem must therefore be with Mr Khanna's individual temperament. In any case, it is rather unusual for an adult of his background and accomplishment to let himself be brainwashed twice within three days—the first time by Mr Charan Singh and the second by Mr N.A. Palkhivala. (By the way, I have always wondered why this practice should persist of ex-judges being referred to as "justice" So-and-So. Now that ex-judges are available for all kinds of odd jobs, most of them as non-judicial as anything that has to do with Iran's religious courts, we must take courage in both hands and stop referring to former judges by some mystical caste appellation).

In these days of quick-shifting loyalties, it is rare to come across instances of faithfulness. This being so, Mr Balraj Mehta of the *Indian Express* deserves a salute of sorts. He is manfully striving to remain true to his fallen patron, Mr George Fernandes—and let us hope that he will not give up the effort too soon. Taking a cue from his master, he has sharply and harshly admonished Mr T.A. Pai for daring to pronounce on industrial policy when the Industry minister is someone else. It has not occurred to him to pause and ask himself whether Mr Fernandes had not been doing an act of Satan rebuking sin. Come to think of it, I cannot recall Mr Balraj Mehta objecting to Mr Fernandes pontificating on the Janata government's moral duty and political dharma to grant bonus to railwaymen, although he was neither the minister for Railways nor the minister for Labour. On the contrary Mr Balraj Mehta lost no opportunity of cheering Mr Fernandes on. I am, however, not going to be unduly uncharitable to a colleague since, in my time I have seen so many dubious tie-ups or cosy relationships between politicians and journalists. In any case, there are very few politicians of the quality of Gobind Ballabh Pant or TTK whose respect and goodwill journalists could hope to keep even while criticising the minister's policies or official acts, however strongly. It is more usually the case that a journalist has to pay for political patronage or friendship with his own small change.

I am resuming this column after a period of eight weeks spent eventfully on a hospital bed, after surgery for a very conventional ailment, which was followed, however, by some very unconventional post-operative complications. My hospitalisation got unexpectedly extended to two months from the predicted two weeks. During this period of immobilization what caused me as much discomfort as the physical pain and strain and mental stresses of repeated surgery was the uneasiness over not being able to write this column during some of the most provocative weeks in our political history.

I am, however, happy that it is not yet too late for me to pay my tributes to the one politician who has been able to emerge from the ordeal of today's political developments with his personal and political integrity shining like burnished gold. I am referring, of course, to Mr Madhu Dandavate. To whom else could the reference have been ? By the way he has conducted himself in the face of challenges and temptations, he has shown up all the more glaringly the venality of the rest of the tribe. Mr George Fernandes, especially, has suffered by comparison. Why quibble about "defection" ? Mr Dandavate has settled the issue finally by saying that, having been elected on a Janata party ticket, he would not change his party allegiance so long as he chooses to last out his term as a member of the legislature. Here is a Roman if ever there was one.

VB

Cover feature

The tasks ahead

August 15, the Independence Day, is an important occasion to have a look at the state of the economy. This year the fluid political situation has imparted an added dimension to this assessment.

The economy has come under serious strains in the recent months because of the inflationary tendencies raising their ugly head in a menacing manner. The global developments, particularly on the energy front, have provided a good deal of stimulus to these tendencies. But the deterioration on the home front, caused by such factors as sluggishness in industrial output, fears of some setback to agricultural output, mounting import bill, none-too-satisfactory performance in several infrastructure fields, etc., also is responsible for the sharp uptrend in prices since March. The upswing has not yet exhausted itself. Price stability, therefore, may not be restored for another couple of months.

The stability of the present government at the centre is a big question mark. It will be decided next week. This piece, by Mr R.C. Ummat, dwells at some length on the main economic issues confronting the nation at present.

AS PRIME minister, Mr Charan Singh has a tryst with destiny on August 20. Lok Sabha reassembles on that day to provide an opportunity to the Janata (S) and the Congress (S) coalition, led by him, to secure a vote of confidence, as directed by the president, Mr N. Sanjiva Reddy.

Both the ruling coalition and the opposition—the Janata party—are busy in mustering the unattached votes in the House. While Mr Charan Singh hopes to win the vote of confidence, the leader of the opposition, Mr Jagjivan Ram, is equally optimistic about bringing down the present set-up and forming an alternative government.

Even though most of the parties and groups do not favour a mid-term poll, some talk still persists amongst the politicians that in case Mr Charan Singh fails to secure the confidence vote, the president might think of ordering a mid-term election. Mr Jagjivan Ram, however, has asserted that since he would be able to form a viable and stable alternative government, the president, in line with the precedent set by him in calling upon the former opposition leader, Mr Y. B. Chavan, to explore the possibilities of forming a new government after Mr Morarji Desai had submitted his resignation from the prime ministership on July 15, will be obliged to invite him to form the new government.

The situation, of course, continues to be fluid at the time of writing this piece, although the chances of Mr Charan Singh's survival have brightened following the 22-member CPI(M) deciding to vote in his favour. The picture can be expected to clear up only a few hours before the voting takes place. The uncertainty has been caused primarily by two factors. First, the Congress(I), which has a strength of 72 members in Lok Sabha, has already announced that its unconditional support to Mr Charan Singh ended when he was sworn in as the prime minister on July 28. Its options at present, therefore, are open. Mr Jagjivan Ram has declared that his party would not be averse to Congress(I) support in pulling down the present government if it is voluntarily offered. Second, there is a good deal of dissatisfaction amongst the Congressmen led by Mr Swaran Singh. A sizeable number of the members of this party are demanding conscience vote on the confidence issue. The main reason for their resentment is the selection of the ministers representing them in the coalition.

The 18-members AIADMK group too appears to be keeping its options open: so also the 8-member Akali Dal. Both these groups have yet to finally declare their decisions. While on the one hand, the AIADMK group has stated that it would not like to bring down Mr Charan Singh's government, simultaneously it has stressed that it would side with the party which is in a position to provide a stable government at the centre. The possibility of a sizeable number of Lok Sabha MPs belonging to various groups abstaining from casting their vote on the confidence issue too cannot be ruled out. This has blurred the picture further.

It is, of course, erroneous to assume that it is the Congress(I) and to some extent the parties and groups such as the CPI(M), the AIADMK and the Akalis which are individually in a position to call the shots. The arithmetic on which Mr Jagjivan Ram is proceeding suggests that he may be able to muster enough strength without the support of the Congress(I), provided, of course, a significant number of Congress(S) members decide to side with him. With the effective strength of Lok Sabha having been reduced to 534 members, Mr Charan Singh will require 268 votes to remain in power. The same number of votes will be needed by Mr Jagjivan Ram to pull him down and succeed him.

Interestingly enough, the issue of the Jana Sangh group's dual membership of the Janata party and the RSS, which had played the predominent role in politics last month, resulting in fairly large-scale desertions from the Janata ranks, appears to have been relegated to the background. Some suggestions have been made for the reunification of the Janata party if Mr Charan Singh is accepted as the prime minister. They, however, are understood to have been cold-shouldered by the present Janata leadership. This development provides an added proof to the fact that Mr Morarji Desai was ousted from the prime ministership, in an unabashed struggle for power. The Jana Sangh group's dual membership issue was just a facade.

Only time will tell whether Mr Charan Singh remains in power next week or he is obliged to yield place to Mr Jagjivan Ram. But whatever the course of events might be, the question uppermost in every citizen's mind is whether the government will be able to effectively tackle the economic issues confronting the nation at present.

The immediate task which the government has to attend to, as Mr Charan Singh stressed in his address to the nation from the ramparts of the Red Fort on the Independence Day, is the containing of the inflationary tendencies in the economy. After remaining remarkably stable during the last two years, the wholesale prices index resumed its upward trend in March, soon after the presentation of this year's central budget by Mr Charan Singh, the then deputy prime minister in charge of the portfolio of Finance. The wholesale prices index (all commodities) (base 1970-71=100) increased from 184.1 in April, 1977, to 188.2 in September, 1978—by about 2.2 per cent—but declined thereafter to 182.9 in March, 1978. There was, thus a marginal decline in the overall wholesale prices during 1977-78 as a whole. In the subsequent year, the index continued to rise after March till December, but showed again a perceptible fall during January and February. The annual average index in 1978-79 worked out to 185.5—0.2 per cent lower than the 1977-78 average.

The immediate task which the government has to attend to is containing the inflationary tendencies in the economy. After remaining remarkably stable during the last two years, the wholesale prices index resumed upward trend in March.

In the first quarter of the current financial year, i.e. April to June, the index rose from 190.5 (March 31, 1979) to 203.3 (June 30, 1979), showing an increase of 6.7 per cent. The increase since the presentation of the central budget had been slightly over nine per cent. Compared with the index for the week ending June 29, 1978, (186.4), this June-end index was higher by the similar degree of nine per cent.

Since the end of June, there has been a further substantial rise in this index. It touched 212.1 for the week ending July 28. There has, thus, been nearly 14 per cent rise in wholesale prices since the presentation of this year's central budget. The increase over the 12 months to July-end also had been approximately of the same order.

A significant fact to be noted about this year's rise in prices is that the indexes for all the groups and sub-groups have gone up: those of food articles, fibres, tobacco and beverages, textiles, chemicals and chemical products moderately and of the others by a wider margin. The inflationary tendencies, thus, have been all-pervading, the cereals sub-group not excluded despite comfortable food stocks and the record harvest last year.

Opinions continue to differ on whether the sharp increase in prices since February-end this year has been caused primarily by the budgetary proposals of Mr Charan Singh. Official sources continue to maintain that a major portion of the rise has to be attributed to factors not connected with the budget. These, they assert, include such factors as the seasonal influences, the structural adjustments which were necessary in the prices of some commodities such as sugar, khandsari and gur, steel, coal, cement, vegetable oils, and the pressures emanating from the developments on the international oil front. To no insignificant extent, the situation has also been aggravated by transportation difficulties, unsatisfactory industrial relations and the inflationary trends in the world economy.

The optimism expressed by the Finance ministry sources last month that with the structural adjustments having been made by then in the prices of vegetable oils, steel, cement and sugar, the price level would tend to stabilise, however, have not materialised. On the contrary, the situation has tended to worsen. The two more important reasons for this apparently are the political instability that has cropped up during the past five weeks and the structural adjustment effected in the price of coal.

In fact, we are passing through the second phase of inflation during the current year. This started with the coal prices being stepped up last month on an average by Rs 25.67 per tonne in the case of supplies from Coal India Limited and Rs 21.22 a tonne in respect of those from the Singareni collieries. This phase was just half way through till the prices of all petroleum products except naphtha, fuel oil and low sulphur heavy stock (LSHS) used in the manufacture of fertilizers, and lubricants of various grades, were raised with effect from August 17 with a view to compensating the refineries for the increased cost of crude oil.

The basic price of petrol has been put up by 35 paise a litre, those of kerosene and high speed diesel oil by 17 paise a litre, that of light diesel oil by 32 paise a litre and those of fuel oil and LSHS used for purposes other than the fertilizer industry by 32 paise a litre. Naphtha for non-fertilizer use is to cost Rs 1.47 per kg more, aviation fuel oil 74 paise per litre more and liquefied petroleum gas Rs 5 more per cylender of 15 kgs. The price of bitumen has been raised by 50 paise a kg. Such special products as benzene, jute batching oil, raw petroleum coke, carbon black, phenol extract, aromax and solvents are to cost 25 per cent more. These price increases will fetch the refineries about Rs 870 crores during the rest of the current year. The additional burden on the exchequer due to the crude oil price hike is estimated around Rs 1,150 crores. The balance burden, thus, will have to be borne by the exchequer which benefited to the extent of Rs 280 crores from the raises effected in the excise duties of some petroleum products in the central budget on February 28.

The impact of the increases in the prices of coal and petroleum products as well as in steel, cement and various other basic materials is bound to be all pervading—directly in pushing up production costs as well as through enhanced transportation tariffs. Even the central budget injected not an insignificant dose of cost push inflation into the economy.

Besides the above factors, the price level has come under serious stress this year by the sluggishness in industrial growth, continuing sizeable expansion in the money supply with the public, the huge deficit financing planned for the year and the generally high cost of imports effected to meet the shortages of a wide range of products and materials. Exports, though necessary, are exerting an upward thrust on prices. The insufficient rains this year have also marred the prospects on the agricultural front.

With large food stocks and a comfortable foreign exchange position it should be possible to obviate the shortages once the current phase of inflation exhausts itself provided domestic production of mass consumption goods is allowed to be increased.

With the large food stocks (around 20 million tonnes) which we have at present and the comfortable situation on the foreign exchange front resulting from these reserves amounting to over Rs 5,500 crores currently, it should be possible to obviate the shortages of basic commodities and to stabilise the prices once the current phase of inflation exhausts itself in a couple of months. But this assumes that domestic production is stepped up simultaneously, particularly of industrial items of mass consumption and the infrastructure bottlenecks are broken.

Infrastructure, indeed, has come under heavy strain in the recent months for one reason or the other, including deterioration in industrial relations. Concerted efforts have to be made towards improving the situation all along the line—in transport and communications, the ports sector, power supply, etc. The railways, it is understood, have already suffered a serious erosion in their expected surplus this year—to the extent of over Rs 40 crores. Even if the situation impoves in the coming months, they surely cannot be expected to yield the anticipated surplus of about Rs 71 crores.

Last year not only the agricultural sector did well but also the industrial sector. The situation had improved on the transportation as well as power fronts. Exports too did not fare badly, though the position left much to be desired upto November. There has been deterioration all along the line this year.

With a view to containing the expansion in the money supply vis-a-vis the growth of the economy, the Reserve Bank of India has been asked to devise ways and means to curtail credit. It is reported that the bank rate might be stepped up by two per cent. Costlier credit does help in its rationalised use but if it affects production, it is bound to be counter-productive. Care, therefore, has to be taken to meet the essential needs of credit for productive purposes.

Endeavours are proposed to be made for reducing the massive budgetary deficit this year. The anticipated deficit of over Rs 1,400 crores, taking into consideration the modifications effected by Mr Charan Singh in his budgetary proposals, is bound to grow, notwithstanding the fact that the price increases allowed in the case of coal, petroleum products, steel, vegetable oils, etc., will reduce the element of subsidy involved in their cases. There is, therefore, an urgent need for containing the governmental expenditure to the extent possible especially when it is expected to grow on account of such factors as increase in the emoluments and dearness allowance of government employees, the general rise in administrative expenditure owing to inflation affecting governmental purchases, etc.

Besides the price rise, the other major causes of concern for the nation at present are the deterioration in the general law and order situation in the country and the growing corruption. Serious attention has to be paid towards these. Discipline in administration too has got eroded to a great extent in the past few months.

From the longer term point of view, the current emphasis on the development of agriculture, small-scale and village industries, power resources, etc, is not misplaced for it should help in opening up new avenues of employment in the rural areas. The increase in the purchasing power in the countryside should provide widened markets for the medium and large-scale industries, leading to the expansion of this sector as well.

It, however, appears that the shift in priorities is too pronounced; it can create many a new complication. What is needed is a balanced growth of the economy so as to ward off undue surpluses of some commodities and shortages of others. The increased incomes in the countryside can benefit the rural folk only if the consumer items they need are available in adequate quantities. Otherwise, their higher prices will negate the increase in the rural prosperity.

Mr Charan Singh's declaration recently that he is not against large-scale industries needs to be welcomed. But he must follow it up with concrete action. His hint that "in very special cases", his government may not refrain from resortting to nationalisation of industries, indeed, has created disquiet among the industrial circles, even though it might have been done to placate the leftists in a bid to secure their support on the confidence issue. Loose talk about nationalisation in the past has done great damage to the economy, leading to insufficient investments being made in the industrial sector. **Now that the investment climate has tended to improve, cold water ought not be thrown over it, especially when the saving capacity of the present investing classes is bound to get eroded due to inflation. Securing of funds from the rural rich for investment in industry can only be a slow process : they will have preference for investments in land.**

Much is made of the growing income and wealth disparities in the country. One of the basic reasons for this phenomenon is the inflation boosting the value of the existing assets. The tendency of the weaker sections to proliferate is another major factor.

Small-scale industries, indeed, can deliver the goods over a period of time. But if shortages in the meantime are to be obviated, undue curbs on the production in the medium and large-scale sectors are not justified.

Another important fact that needs to be stressed in this connection is that it will be inappropriate if the investments made already are not to be allowed to yield the optimum results. Under-utilisation of capacities breeds inflation as production costs mount. Serious thought ought to be bestowed on this issue in an objective manner.

Much is made of the growing income and wealth disparities in the country. It is not fully realised that one of the basic reasons for this phenomenon is the inflation boosting the value of the existing assets. The tendency of the weaker and the less affluent sections of society to proliferate is another major factor. The family welfare programme has succeeded so far by and large among the more affluent, both in the urban and the rural areas.

It is well recognised that the population explosion has acted as a serious drag on the gains which our economy has made since independence. After some setback in the post-emergency era, the programme has started succeeding again even on a voluntary basis. No effort need be spared to foster it further.

In the interest of long-term growth on a balanced basis, the planning process too has to be put on an even keel. The political wranglings have undoubtedly imparted a setback to the implementation of the planned programmes. The situation needs to be rectified as expeditiously as possible.

The stress put by Mr Charan Singh in his Independence Day address on pushing up production and productivity all round was fully justified: so also his plea that rights must be counter-balanced by obligations. It remains to be seen how far Mr Charan Singh or his successor will be able to contain sectional interests, particularly the organised ones. Through their bargaining position, they are successful in wresting significant concessions. Yet they must be made to realise that in the long-run, their fortunes cannot be unrelated to the general conditions in the country. Weak-kneed policy will not do. The central government has to exert itself and straighten out the distortions which have grown in the economy and national life.

Revised minimum needs programme

Prof. J.D. Sethi

Poverty in India is both economic and social and any strategy which deals with one while leaving the other is not likely to succeed says the author, who is a member of the Planning Commission. The draft sixth Plan stipulates that there is no basic conflict between the government's strategy of social development of minimum needs. The two should complement each other

THE FIVE-year Plan for 1978-83 has laid three objectives before it: (1) the removal of unemployment and under-employment, (2) an appreciable rise in the standard of living of the poorest section of the population, and (3) provision by the state of some of the basic needs of the people in this income group. The basic needs include drinking water, adult literacy, elementary education, health care, rural roads, rural housing for the landless, minimum services for the urban slums, etc.

The basic needs have been given the name of Revised Minimum Needs Programme (RMNP). The word 'Revised' is used for a definite reason. Originally the concept of minimum needs was initiated in the draft fifth five-year Plan, but in the final Plan the chapter was dropped. The draft sixth Plan has not only brought it back but has given it a new meaning and role.

Whereas the overall economic objectives of the Plan relate to certain growth rate, employment, self-reliance and reducuction in disparities in income and wealth, the social objectives are adumberated in RMNP. Unemployment, poverty and inequality are related phenomena and that is why the Plan's strategy aims at solving all these problems simultaneously.

It has been assumed that the growth strategy which deals with economic variables will have to be combined with the strategy dealing with social variables. The latter strategy includes those programmes which are directed towards strengthening the social position of the poor. Briefly, one may say that the draft sixth Plan has a double strategy of economic growth and social restructuring, the latter taking the shape of enlarged programme of RMNP.

The most important underlying idea of this double strategy is that poverty in India is both economic and social and any strategy which deals with one while leaving the other is unlikely to succeed. The RMNP is largely designed to attack the programme of social poverty although it also has the inbuilt aim of preparing the poor for entering the economic, particularly the employment field, without physical or social disadvantage. In other words, the draft sixth Plan clearly stipulates that there is no basic conflict between the growth strategy and the strategy of social development of minimum needs, as sometimes is made out. Any dichotomy between the two is false; the two must complement each other.

The RMNP is an integrated set because no one programme by itself can succeed or even be conceived without getting it linked with other programmes. For example, the Community Health Services Programme, which is the bed-rock of the new health care system cannot be separated from the supply of safe drinking water.

We can go a little further. If people are expected to have small family norms, then the entire health services must guarantee definite survival of a minimum number of children and this survival depends as much on health care and supply of safe drinking water as on any other.

Another distinguishing feature of the RMNP, as formulated in the draft sixth Plan, is that unlike the previous Plans, the social services will not be treated as a residual item, remaining at the mercy of the exigencies of the crisis or the core of the Plan.

For the first time, it has been accepted that a certain minimum set of social services would be given as high a priority as any other programme. The rationale of this approach is that the full employment strategy depends upon the provision of certain basic minimum needs without which the socially under-privileged and physically weak will not become a part of the employment matrix.

In previous plans, the assumption behind the social services was that of equality and opportunity. This was explicitly stated with reference to education, health, etc. Our experience during the last 30 years has been that most of the social services were appropriated by a small minority despite the clear intention of the planners to make such services available to all.

benefiting the poor

The principle of equality of opportunity alone is not adequate. Indeed, in practice, it reinforces the existing inequalities. Therefore, certain programmes as formulated in the Plan are those which are supposed to benefit the poor only.

The shift in priorities in education is one of the most important aspects of the draft sixth Plan, since education is the most important factor for improving the competitive position of the poor people. The RMNP takes care of it.

The aim of universal elementary education is not merely to make everybody join the school but also to be retained in the school system. This depends on the social and economic compulsions of the poor families. The foregoing double strategy of the Plan aims at strengthening the social and economic base of the poor. It further aims at making them socially aware of the need for self help.

The concept of informal education has

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puff cigars

❋ The Russians
wear chappals

❋ The Yugoslavs
sip tea

❋ The Germans
drink coffee

❋ The Americans
sport 'kurtas'

❋ The Iranians
have a sweet
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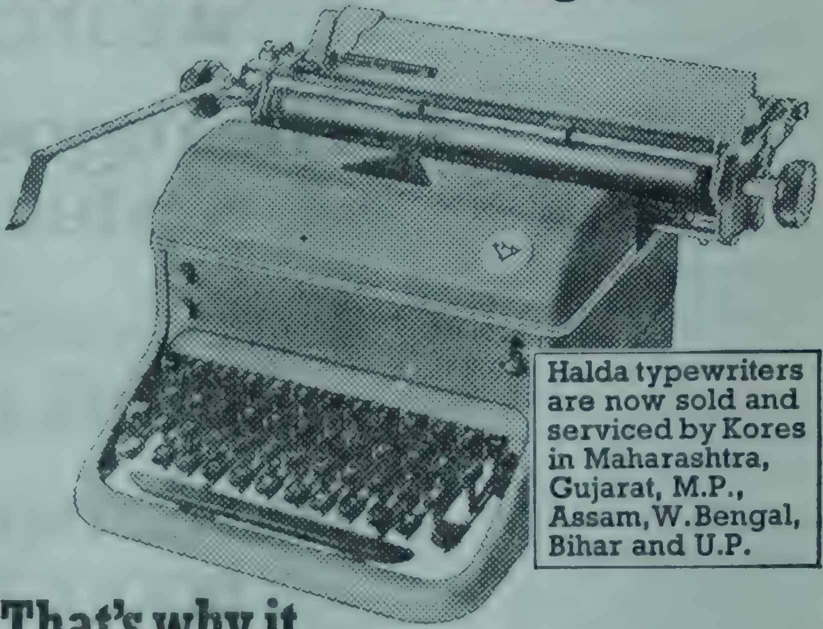

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been included in the RMNP to see that the education system is flexible enough to make use of the facilities that will be created through the Plan.

Adult education is another programme which is supposed to improve the position of the illiterate poor whom the education system has bypassed in the past. Adult education is not merely a programme of literacy but aims at creating awareness among the illiterates about their problems and rights as well as for improving their skill formation.

Few people seem to realize that a substantial section of our population is going through a biological decay. Indeed, those who live below the poverty-line are malnutrited because their intake of calories is inadequate. It is estimated that on the basis of 40 per cent of the population living below the poverty-line, there would be between 40-50 million children between the age of 0-6 and lactating mothers who are malnutrited.

The best cure for this malady is to improve the employment and income levels of these families. However, until these people are brought into the employment fold, they have to be protected nutrition-wise. That is why nutrition has been made an important component of RMNP.

As mentioned earlier, the supply of safe drinking water could be the highest priority in any development plan. This is not only necessary as a physiological necessity but also is an important component of any health care scheme. No other sector in the draft sixth Plan has been given so much importance, in relation to other social sectors, as rural water supply. It is proposed to allocate more than Rs 1,460 crores for this programme.

It is well recognised that rural roads, rural electrification and rural housing are a part of any integrated programme of rural development. These services are commonly used but it is hoped that these will help breaking the prevailing rural-urban rigidity as well as improving the mobility of the poor. These programmes have found a special place in the RMNP.

The draft sixth Plan has allocated more than Rs 4,800 crores for the RMNP. This is more than five times the combined total of what was provided in the fifth Plan. This magnitude of expenditure can certainly make a big dent into the problem of social poverty if the programmes are properly implemented. Implementation remains a very weak aspect of most social services programmes run by the government. Voluntary organisations have been pressed into service in respect of some programmes but the impact is very small because most of these are located in the urban areas.

By the very nature of these programmes, they require an effective delivery system at the local levels. Fortunately, we have now anywhere between 35 to 45

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functionaries working at the block level who are engaged in various programmes of development.

If the work of these functionaries can be integrated both in respect of RMNP and other programmes, we would have made a major breakthrough in creating a package delivery system for a package programme. Neither the central government nor the state governments alone can directly administer programmes of social significance for the poor.

More important than anything else is the awareness about involvement of the community in these programmes. Normally, the rural poor can be organised either through a political process or through the creation of autonomous institutions. Political parties have not yet reached the rural areas in any significant way.

A statutory decentralisation of economic and political power is a necessary condition for political process to be generated for development in the rural areas. It seems it will take quite some time before such decentralisation is effected. In the meantime we are left with the only alternative, namely, that the programmes of social and econmic development should be so arranged as would require the direct involvement of the groups in the programmes themselves. For example, if the organisation of the rural women for such programmes as adult education, social hygiene, family planning, enlargement of economic opportunities are created, then a major institutional change would have taken place.

One can think of other organisational structures around which programmes can be formulated. For example, community irrigation-cum-drinking water schemes have shown a considerable scope. Food-for-work programme can be another instrument of community organisation.

The effectiveness of RMNP in the final analysis will depend upon the creation of such community organisations by the members of the community themselves and with the help that will be forthcoming from the government.

Boosting national productivity: An action plan

M. Krishnamoorthy

The importance of productivity was realised by the industrialised countries in the earlier part of this century. It has today become an integral part of the highly complex industrial economics, says the author who is executive director, National Productivity Council. In India, this sophisticated and scientific concept was accepted two decades ago and has greatly helped our industrial and economic growth.

INDIA IS passing through an era of dynamic changes and there is a strong desire all around to achieve rapid progress. It is also widely acknowledged that the success of any efforts in this direction would largely depend on the efficiency with which we are able to use our limited resources. In other words, the role of productivity as the foundation for the country's economic prosperity and advancement is duly recognised.

The National Productivity Council (NPC), set up in 1958, had for its charter the generation of an ongoing productivity movement in the country. However, considering the vast size of the country, this was a massive task. So ways and means had to be found to spread the ramifications of the movement. It was in this context that the concept of local productivity councils (LPCs) took its birth and, today, there are 49 of them serving almost all the important industrial centres of the country.

In its early phase, the NPC had necessarily to concentrate on arousing general productivity consciousness through promotional work, on the one hand, and establishing a more meaningful contact with those sections of society who had a direct stake in productivity, on the other. Industrialists, trade union leaders and government functionaries were, thus, brought together at forums like seminars and symposia to discuss the different aspects of productivity, and various training programmes aimed at making the running of enterprises efficient, profitable and competitive were undertaken.

The scope of NPC's activities gradually expanded and demonstration of productivity techniques in actual factory situations, followed by suggestions for improvement, was given greater emphasis particularly on the technological factors affecting productivity. In addition, NPC has also devoted considerable attention to key economic problems such as prices and incomes, wage disparities, capacity utilisation, productivity trends in core industries like cotton textiles, iron and steel, cement and so on.

Problems of management, organisation and distribution are coming up and the NPC will have to play an effective role in finding solutions to these problems and, thus, strengthening the hands of the government. Similarly, some of the public sector units are showing signs of "sickness" and need to be helped.

Congestion problems in the public transport systems, like the railways and ports and docks, are another area where the NPC could demonstrate the efficiency of productivity techniques in streamlining their functioning. And, last but not the least, productivity needed to permeate to the shopfloor if any tangible results were to be achieved. In line with this new thinking, the NPC is preparing to make a break with the past and undertake a number of "non-conventional" activities.

The cottage sector will receive priority attention in the new scheme of things. The areas presently chosen for concentrated attention are soap and match-manufacturing units. According to the projections for the 1978-83 Plan period, the Khadi and Village Industries Commission (KVIC) envisages setting up of

6,600 new matches units with a total investment of Rs 66.10 crores; the present number of such units is 3,000. The KVIC's present share in toilet soap production is 15,000 tonnes, but it hopes to step it up to 22,500 tonnes in three to four years. It has also plans to raise its production of laundry soap from the present 16,000 tonnes to 2.5 lakh tonnes.

The NPC proposes to assist the KVIC in evaluating its "rapid expansion" plan for six per cent growth in matches production with respect to organisational and operational plans and availability and development of raw materials, designing of suitable monitoring systems and undertaking demand surveys in order to evolve a suitable marketing plan. As regards soap, the NPC has already identified six areas for study, viz., oil development, process improvement, quality promotion, economy measures, marketing and entrepreneurial development.

Productivity services are already being provided to the small industries and will be extended further to both the existing units and the new units coming up under the District Industries Centres (DICs) Scheme. This calls for a widening of the scope of the existing services to include in their ambit modernisation, area studies, industry diagnostic studies and techno-economic feasibility studies for product lines, and the training of DIC functional managers.

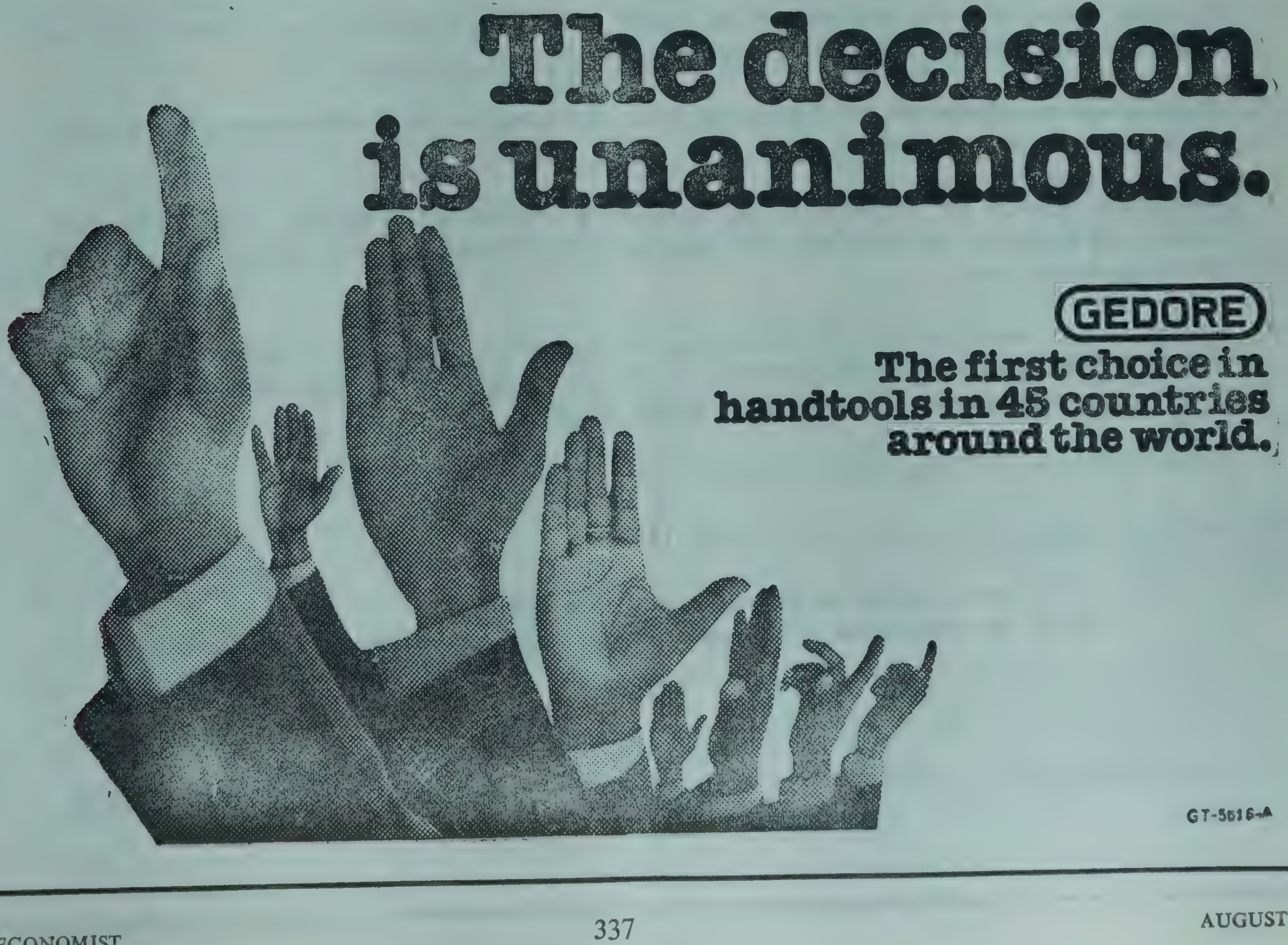
Besides, development of model micro-hydel projects for hill regions and schemes for the development of forest-based industries are envisaged.

Another important activity on the cards of the NPC is to provide organisational support to developmental agencies engaged in rural development work. Recently, it completed a rural artisan-oriented pilot study of 10 blocks on behalf of the All-India Handicrafts Board. The objective of the study was to identify the problems faced by the rural artisans in carrying on their traditional skill-oriented avocations in a profitable manner.

It was during the course of this study that the NPC brought up the concept of rural marketing centres at the block level for providing a package of services to the artisans in respect of procurement of raw materials, financial aid, product support and marketing, and to act as an effective link between the artisan and the various developmental agencies operating in the area.

The board has welcomed the findings and has asked the NPC to undertake similar studies in 50 more blocks. What's more, the NPC has also received a request from the Kerala government to establish and operate a model rural marketing centre in the state.

It might also be mentioned that the NPC proposes to collaborate with BHEL, Bhopal, in the preparation and implementation of its schemes for rural community development, with particular emphasis on creation of gainful employment. This would be done by the establishment of those cottage and small-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scale industries in the adjoining villages whose output can be directly absorbed by BHEL itself.

It had been suggested that certain subsidiaries of the National Textile Corporation which were incurring heavy losses should be studied by the NPC with the twin objective of helping these units to maintain their production levels as well as raising the productivity of the capital employed by them. Some preliminary data-gathering and discussions with the management of the West Bengal subsidiary of the NTC have already taken place and proposals for a detailed study are now under preparation. In the sphere of transportation bottlenecks, it was felt that the NPC should study the congestion problems at the Bombay port and the Moghulsarai railway yard.

Economic and industrial development of the various states and union territories in the north-eastern region is another important plank and the ministry of Industry has constituted an expert committee, supported by four sub-committees, to prepare project reports. The NPC is expected to play the part of a lead organisation for implementing the recommendations of the various project reports.

It is now well known that most of the power-generating units of the state electricity boards are working at as low an efficiency as 50 per cent of their installed capacities. This may be ascribed to their low operational efficiency, poor maintenance, transmission and distribution losses, non-availability of spares, interrupted supplies of coal and furnace oil, equipment problems, industrial relations problems, and so on.

There are certain live problems connected with productivity promotion which need intensive attention in view of their critical importance to the national economy. The NPC proposes to establish separate centres to devote themselves exclusively to some of these problems in the coming years. These centres include: International Centre for Productivity, near Delhi; National Centre for Technology Transfer Studies, at Bangalore; Small Industries Centre, at Hyderabad; Centre for the Decentralised Sector in the North-Eastern Region, at Gauhati; and Centre for Agricultural Productivity, i Himachal Pradesh.

Deep involvement of the workers is prerequisite for the success of the productivity movement. The message o productivity has, therefore, to be carrie to the shop-floor level in a big way an trade unions are to be prepared for playing a meaningful role in promoting productivity among the workers. The presen activities of the NPC concerning productivity programmes for workers and trad union leaders are accordingly being expanded and intensified.

It would augur well for the country' progress in every field if productivit instruction was made an essential part o our school education. The NPC has been making efforts to have it accepted by al concerned, and this has yielded encouraging results. The NCERT experts hav already drafted a phased syllabus fo introduction at various levels of schoo education. What more could serve th interests of the Nation better tha winning over the young, impressionabl minds in favour of a productive way o life?

Powering village growth

An new scheme to channel more funds for rural electrification has been launched jointly by the Rural Electrification Corporation and commercial banks. The REC, which is observing its tenth anniversary this month, has pumped out over one thousand crores of rupees for electrification of villages and bringing light where there has so far been darkness.

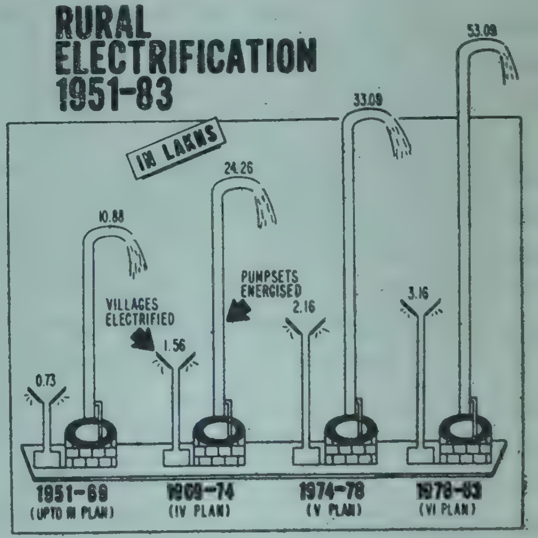
ELECTRICITY REACHED all the villages in Kerala last month. Kerala, thus became the third state in the Indian union to have achieved this distinction, Haryana and Punjab being the other two. Tamil Nadu will follow suit very shortly when 15,700 of its villages will have electricity. This state has also the highest number of power-operated pump-sets—nearly a million.

The dynamo of development, however, is yet to be charged by electricity in about 60 per cent of India's 5.76 lakh villages. Beginning with barely 1500 electrified villages in 1947, India has literally come to the half-way point in rural electrification.

Beyond the statistics lies a stark contrast between darkness and light. As may as 2.31 lakh unelectrified villages are in five big, economically backward states —Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh. The villages in the five states of the north-east form the other dark corner in the rural electrification map.

The criticality of the problem necessitated the inclusion of rural electrification in the minimum needs programme of the fifth Plan. This helped in connecting power lines to at least 30 per cent of the rural population in the states which were lagging behind in rural electrification. The north-east, however, could not reach the target.

As large a sum as Rs 1,750 crores has been earmarked for rural electrificatio during the current Plan—1978-83. On



Every year over 20,000 villages will be electrified and four lakh pumpsets energised during the sixth plan (1978-83). In the previous plan, the pace of electrification was about 15,000 villages a year and energising of 2.2 lakh pumpsets. By 1983, electrified villages in India would number 3.16 lakhs and energised pumpsets 53.09 lakhs.

lakh villages are slated to be electrified and 20 lakh irrigation pumpsets will be energised. Of the one lakh villages, 40,000 will mostly be in backward and tribal areas. This is so because the revised minimum needs programme accords them special attention.

The target set seems to be within reach when we look at the fact that during the fourth Plan 83,000 villages were electrified and over 13.3 lakh pumpsets were energised. The tempo was more or less maintained during the fifth Plan. In 1978-79 the first year of the current (sixth) Plan, more than 22.000 villages were electrified as against an average of 8,000 villages electrified every year during the 28 years to 1977-78.

Power connection to rural areas is of critical importance for all plans to raise farm output and village industrialisation. A new scheme to canalise more funds for rural electrification has been launched jointly by the Rural Electrification Corporation and commercial banks. Incidentally the REC, which is observings its tenth anniversary this month, has pumped out over a thousand crores of rupees for making the villages power plus.

With the new thrust rural electrification is receiving, the rest of the 3.49 lakh villages can be expected to be electrified by the mid-1990s.

Role of technology in economic development

Numerous processes and appliances perfected by the CSIR laboratories have assisted in the transformation of the quality of life of the Indian people. New techiques have been suggested for economic cultivation of many medicinal plants. A number of pesticides and herbicides have been developed to regulate the plant growth. Its laboratories are assisting in developing devices for better treatment of ailments and have undertaken work on harnessing solar energy for everyday use.

RESEARCHES CARRIED out by scientists in the national laboratories of the CSIR have not only benefited industry—both public and private sector are using them—they have also helped the village people. Numerous processes and appliances perfected by these laboratories have assisted in the transformation of the quality of life of our rural masses for the better. It is quite in the fitness of things that CSIR scientists are fully conscious of their responsibilities to the society where agriculture plays a major role in the life style of its people, provide occupation to 80 per cent of the population and accounts for half of the country's GNP. New techniques have been suggested by CIAMP, Lucknow for economic cultivation of many medicinal and aromatic plants like Bulgarian Coriander, Japanese mint, Citronella (Java type), Palmarosa, Lemongrass etc. A number of pesticides and herbicides have been developed to regulate the plant growth.

Simple and cheap techniques have been evolved by the Central Food Technological Research Institute (CFTRI), Mysore, for making packing materials from local resources like leaves, bamboo, pine needles etc. The laboratory has also perfected techniques for processing, preservation and canning of fruits and vegetables. Equipment has been developed for drying rice, fish and other materials with the help of solar energy.

Useful products have been obtained from agricultural wastes such as paddy husk and sugar industry residues, which are largely wasted in the countryside. Their utilization by simple and inexpensive processes developed by National Laboratories cannot only provide rural employment but also control pollution.

For rural development, housing, roads and transportation have a very important role. CSIR laboratories have developed improved and simple techniques by utilising local materials in building industry, designing of cheap, well planned rural houses, roads etc. Since bicycles are the common means of movement in rural and semi-urban areas, multi-speed bicycle hubs developed by the Regional Research Laboratory, Jorhat, provide an easier and quicker conveyance for common people.

Health and sanitation warrant specific attention in rural areas. A number of tropical diseases are prevalent throughout the country specially in the rural areas because of poor nutrition, inadequate knowledge of cleanliness and lack of sanitary facilities and pure drinking water. National Environmental Engineering Research Institute, Nagpur, is actively engaged in work on these important rural problems. A variety of appliances like night soil wheel-barrows, wash basins, hand flush water seal laterine etc. have been designed to provide them sanitary conditions. Cheap water filter candles have been developed which when fitted to domestic water containers including earthen pitchers, meet the daily requirements of drinking water of an average family.

CSIR laboratories have helped the Indian pharmaceutical and drugs industry in developing new and cheaper drugs. Production processes for a number of drugs have been standardised using indigenous raw materials. Processes have been developed for the preparation of pharmaceutical compounds like magnesium hydroxide, magnesium trisilicate and heavy magnesium carbonates—they are antacids—B.P. Sodium chloride etc.

The country used to import 100 tonnes of Caffeine valued at Rs one crore which is an important drug used in many pharmaceutical preparations. Based on the knowhow perfected by RRL, Jorhat, it is now produced locally from tea waste. A number of drug materials like Diosgenin, Ergot alkaloids, Hyoscyamine, Hyoscine etc. have been developed by CIAMP, Lucknow, for producing important drugs in the country. Diosgenin is the starting material for production of sex hormones, cortisones and oral contraceptives; ergot forms a drug used to stop bleeding after child-birth and treatment of migraine; Hyosciamine is employed as a sedative, antispasmodic and for controlling gripping pain in intestinal disorders and hyoscine is a sedative. Alkaloids obtained from Vinca rosea leaves have been found to be effective against Leukemia.

The Central Scientific Instruments Organisation (CSIO), Chandigarh, has directed its major effort to developing devices used for monitoring different physiological activities within the human body, detection of foreign bodies and ascertaining damage to body parts. One of them is an X-ray image intensifier system which serves the latter two purposes. With the aid of another system six parameters viz., pulse rate, respiration, temperature, heart-rate and systolic and diastolic blood pressures of six patients can be monitored simultaneously. Some instruments for monitoring physiological activities are : Echocardioscope for heart functions, foetus stethoscope and cardiotocograph for foetal heart-beats and mother's uterine pressure, TV display system working model for viewing four different physiological wave forms on a 19″ TV screen (used in coronary and intensive care units), non-fade display monitor for continuous ECG display, kidney monitor which is the monitoring unit for a kidney machine, blood cell counter for counting blood cells and platelets, battery operated monitor defibrillator acting as a quick monitoring facility by picking up ECG from the patient's chest.

As treatment aid, Pacemaker is a significant contribution. Its functioning can be monitored by a pacemaker analyser. To exercise check on electrical safety of medical instruments used in hospitals a safety analyser has been perfected. To help medical research a monkey chamber has been developed for experimentation on monkeys.

Difficult as it is to enumerate all the CSIR processes in industrial production and technology evolved to help public and private sector institutions only a few are cited. SERC, Madras has perfected

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technology for production of prestressed concrete railway sleepers. Also for railways, the Central Electronics Engineering Research Institute, Pilani, has successfully evolved a transistorised locomotive control system which is being regularly produced by Electronic Corporation of India Ltd, Hyderabad. Associated test equipment too has been developed by CEERI; 150 KVA single phase to 3 phase thyristor convertor is another product designed and developed by the institution for the railways.

As a result of researches carried out at CFTRI, Mysore, the country has become totally self-sufficient in baby-food. Different 'Cola' drinks use the concentrate made in accordance with CFTRI knowhow. Central Leather Research Institute (CLRI) scientists deserve the entire credit for making the country self-sufficient in hides and leathers. Their imports have been completely curtailed. The institute has evolved and established technology for production of leathers used in fancy goods, travel goods and for garments as also several chemicals and machinery used in leather production. RRL, Jorhat's mini cement plant and RRL, Bhubaneswar's rotary kiln are other examples of assistance to a key industry.

CSIR scientists did not become suddenly aware of the importance of energy research when the energy crisis appeared on the scene. Its laboratories had undertaken work on harnessing solar energy for mass benefit several years before the event. - Some examples of CSIR developed technologies are : solar water pumps, solar refrigeration system, solar heaters, solar dryers, stills and solar cell panel for generation of power for small appliances like radio transistor sets, batteries, low temperature carbonisation, etc.

Technology assessment for social change

P. K. Kohli

The practice of technology assessment provides a framework for initiating decisions about the appropriate utilisation of technology for social purposes, says the author who is Scientist, Division of Planning & Liaison, National Physical Laboratory, New Delhi. It serves as a tool to maximise contribution of technology for the welfare of the society. It helps avoid social turbulence and attempts to bring forth maximum benefits and apportunities to the society.

It is the utmost and intense desire of every developing and underdeveloped country to raise the economic standard of its people. Efforts in this direction are therefore, put in the technical, industrial, agricultural and scientific fields. In order to have the fruits of latest technology, the developing and under-developed countres many a times resort to the import of full scale technologies without caring about its appropriate utilisation for the welfare of their society at large in the long run. Such an attitude calls for the study of "Technological Assessment."

Emilo Q. Daddario, who first set fourth the present concept of technology assessment stresses the urgent need to improve our methods for apprising the technical, political, economic and social influences arising from the development of science and technology. Daddario clearly suggests that technology assessment should mainly concentrate on establishing the "cause-effect" relationships that result from the development of a "techology" and its impact on society. Such "cause-effect" chains can be used to help maximise benefits and minimise undesirable side-effects of a new technology. Thus we see that the phrase "Technology assesment" introduced by Emilo Q. Daddario laid emphasis mainly to characterise the socio-technical research that discloses the benefits and risks to society in the development of scientific and technological innovations.

The "assessment" affords an opportunity for the collection of data, the analysis of which assists in the development of an insight on the potential impacts of "technology" on society. The result of "technological assessment" can propose a variety of national strategies for modulating the effects of technology on society, thereby providing the legislators, technocrats and scientists in authority (who are responsible for shaping the science policy of the country) with a better base for using their judgement on the role of Government in influencing the particular types of technogies which are to be developed. In other words, technology assessment clarifies the nature of existing social problems as they are influenced by technology with a caution and guidelines to the men in authority to achieve control over such problems. Such guidelines also provide an insight for future allocation of national resources. It enables scientific manpower to choose and decide the type of scientific discovery and development of new technology that they should undertake which could prove to be the most desirable to the society.

In a nutshell it may be said that the practice of the technology assessment provides a productive framework for initiating decisions about the appropriate utilisation of technology for social purposes. In fact, technology assessment is meant to serve as a tool to maximise contribution of technology for the welfare of our society. The study of technological assessments help to apprise short and long term effects, and also the good and bad impacts of emerging tech-

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nologies. The study of technology assessment always serve as a means to secure the maximum social and economic value from technology for society and it establishes a close relationship between science and society. Technology assessment without measuring social values will be considered incomplete.

Technology assessment avoids social turbulence and attempts to bring forth the maximum benefits and opportunities that can be made available from a particular type of "technology" to the society.

It may be worth mentioning here that in order to review and assess technology we should use primarily the "Cause-effect" methodology; the full approach of the assessment task will then fall under two categories i.e. the problem initiated and the technology initiated.

In selecting topics for assessment, the following questions may be kept in view;

1. Does the technology application have significant economic and social impact on a large scale on society and what issues of technology are most urgent at the national level? In fact only those issues of technology which have shown significant social impact be considered for assessment in order of priority allocated.
2. In order to give full consideration to social as well as technical issues, technology assessment should be concerned with rapidly changing technologies and the need to resolve the burning problems of the day such as pollution, deterioration of forest wealth, setting up of huge industries in urban areas and the impact of industial society on the social life in urban areas, nuclear power, ballastic missiles, space exploration, the computor, the depletion of natural resources at the cost of men's health environment etc.

Members of the technology assessment task force should be chosen for their expertise having knowledge about the subject under assessment. No single or permanent organisation should be termed as technology assessment force. Participation of economists, behavioural, political and social scientists is useful to the assessment force. The view point of affected parties should be taken into consideration by the task force. It must be mentioned here that technology assessment team should remain in an environment free from political influence or predetermined bias, so that technology assessment can help to alert the nation about the benefits and future problems the new technology might involve.

The technology assessment team, besides measuring consequences of technological development should also measure social values pertinent to the "quality of life" in addition to the conventional economic and technical risk-benefit criteria, thereby analysing the cause-effect relationship between different strategies and their social impacts. It shall be useful to classify the study of technology assessment as (a) by an existing social problem, and (b) by the potential new technology.

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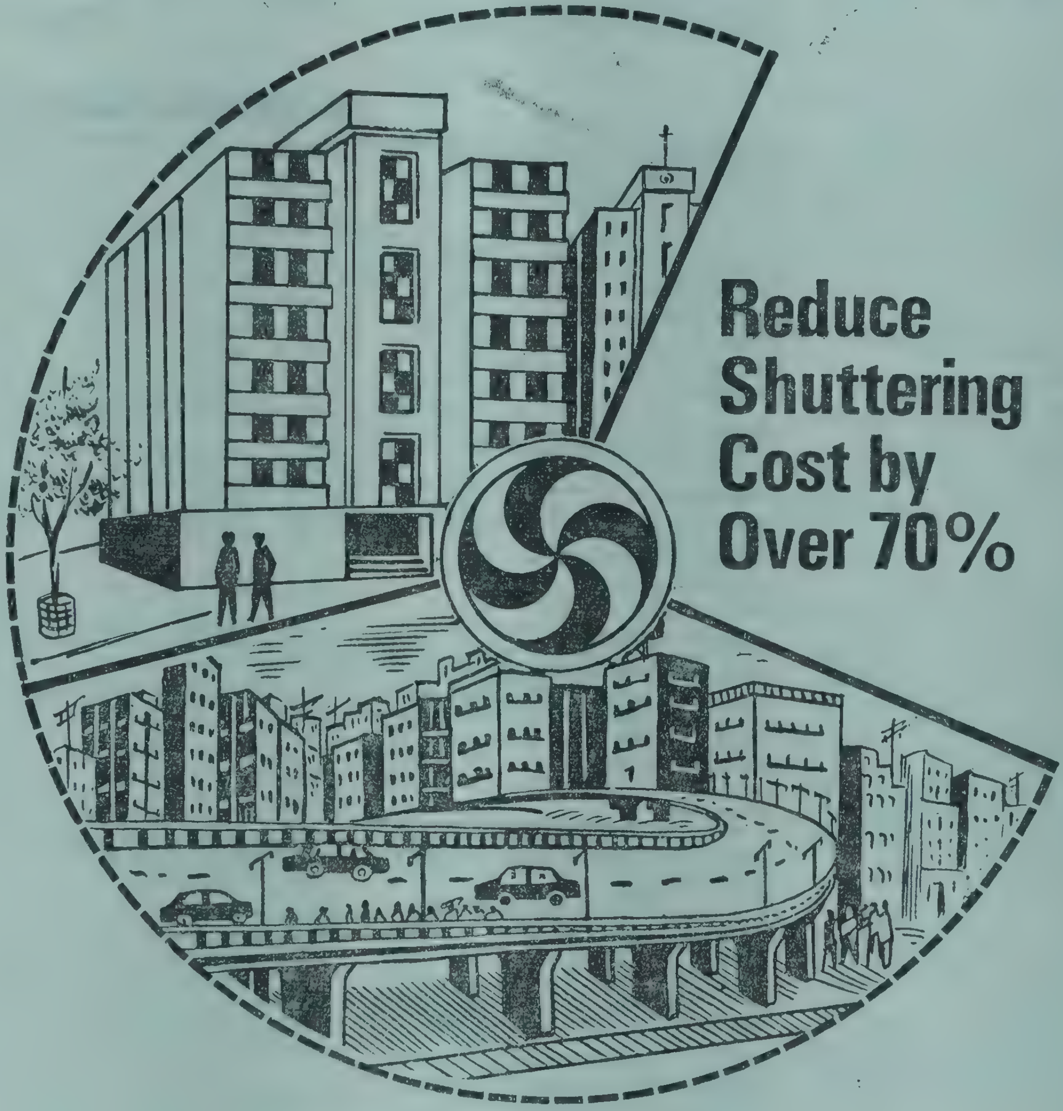

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The shares of the Company are listed on the Bombay Stock Exchange. Applications will be made to the Stock Exchanges at Bombay and Delhi for permission to deal in and for an official quotation for the Equity Shares of the Company.

HISTORY AND EXISTING ACTIVITIES

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The Company was established in 1963 under the name 'International Computers and Tabulators Indian Manufacturing Company Limited', with 60% shares held by ICL, U.K. The name of the Company was changed to International Computers Indian Manufacture Limited on 8th July 1968. The Company commenced manufacture of Data Processing Equipment and Punch Cards in 1963 and Third Generation 1901A Computer Systems in 1968.

With effect from 1st October 1978, the Company has taken over the business of International Computers (India) Private Ltd. (ICL India), the marketing Company, comprising the sale, rental, maintenance and software business of Data Processing Equipment and Computers and the manufacture of Punch Cards for use therewith, together with relative assets for a purchase consideration of Rs. 5,33,00,000 against the book value of Rs. 6,04,78,585. This includes the written down value of the rental business of Data Processing Equipment and Computers of Rs. 4,65,14,408 and the equipment is earning a rental value of about Rs. 35,00,000 per month as at 1st October 1978.

Out of the consideration of Rs. 5,33,00,000 payable to ICL India, 7,00,000 equity shares of Rs. 10/- each at par in the capital of the Company credited as fully paid up will be issued to ICL, UK., and the balance of the purchase consideration of Rs. 4,63,00,000 will be treated as interest free unsecured loan, due to ICL India and/or its nominee(s), to be repaid in three equal annual instalments.

ICL, U.K., now holds 40% shares of the Company. Even after the present issue of shares, ICL, U.K.'s shareholding will remain at 40%.

FINANCIAL HIGHLIGHTS

(Rs. in lacs)

International Computers Indian Manufacture Ltd.

	Years ended 30th September				
	1974	1975	1976	1977	1978
Gross turnover	298.14	337.92	251.85	339.14	252.43
Profit before taxation	20.57	28.93	31.20	38.13	54.82
Equity	50.00	50.00	50.00	50.00	50.00
Reserves & Surplus	49.98	51.19	56.06	59.00	66.68
Dividend	*6%	11%	11%	12%	15%

* Restricted due to statutory provisions

International Computers (India) Private Ltd.

	Years ended 30th September				
	1974	1975	1976	1977	1978
Gross Income (without adjustment for inter-company transactions)	692.71	795.28	826.00	895.48	944.48
Profit before taxation	109.64	135.90	194.51	210.02	191.18

International Computers Indian Manufacture Ltd.
For the period 1.10.1978 to 28.2.1979 (including ICL India business taken over)

Gross turnover	388.87
Profit before taxation	65.70
Equity	75.00
Reserves	83.33

NEW PROJECT/PROPOSED ACTIVITIES

The Company has obtained from the Government of India an Industrial Licence No. CIL: 75(79) dated 7th April 1979 for the manufacture of 2904 Computer Systems, including constituent peripheral devices.

The Company will shortly commence progressive manufacture of 2904 Computer Systems embodying up-to-date features in Computer hardware architecture and software technology, designed to meet total user requirement. 2904 is a multiprogramming system with mixed mode working capabilities and has features like Direct Data Entry and On-Line Data Capture and enquiry facilities, which render the System capable of distributed processing as also modular growth. Technical information and software for enabling the Company to manufacture 2904 Computer Systems are available to the Company in the terms of the agreements with ICL, U.K.

LOCATION OF THE INDUSTRY

The existing plant is located at Pune.

OBJECT OF THE PRESENT ISSUE

To provide a part of the finance required for the new project outlined, in the Prospectus

FUTURE PROFITABILITY AND DIVIDEND

Although the introduction of new products is likely to reduce the profitability in the earlier years, nevertheless, barring unforeseen circumstances, the Company expects to earn adequate profits to pay reasonable dividends in these years.

BOARD OF DIRECTORS

ARDESHIR RUTTONJI WADIA
Chairman
SHYAM HIMATHSINGH UTAMSINGH
Managing Director
PESI KUSHRU CHOKSEY
(Alternate Director for Mr. P.W. Murphy)
JOHN DOUGLAS COMISH
BHUPATIRAI MAGANLAL GHIA
BALAKRISHNA HARIVALLABHDAS
VASANT DIGAMBER KHER
(Whole-time Director)
PETER WILLIAM MURPHY
KANURI LAKSHMI NARAYANA PRASAD (Alternate Director for Mr. J.D. Comish)
CHARLES MURRAY STUART

COMPANY SECRETARY

R.V. SUBRAMANIAN
LLB, FCMA, FICWA, FCIS, FCS, MBIM, MBCS, M INST PS, AMIIE

SHARE CAPITAL

Authorised:

25,00,000 Equity Shares of Rs. 1

Issued, Subscribed and Fully Paid

7,50,000 Equity Shares of Rs. 1

Present Issue:

17,50,000 Equity Shares of Rs. 1

Out of the Present Issue:

7,00,000 Equity Shares of Rs. 1
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as described above o
Computers (India) Pri

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3,75,000 Equity Shares of Rs. 1
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India, Life Insurance C
General Insurance Co
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alongwith the Public I
as may not have been
Financial Institutions v
Public Issue

Now offered for Public Subscripti

6,25,000 Equity Shares of Rs. 1

17,50,000

TERMS OF PAYMENT

On Application Rs. 5.00 per share

On Allotment Rs. 5.00 per share

AUDITORS

A.F. Ferguson & Co.,
Chartered Accountants,
Fazalbhoy House,
11, New Marine Lines,
Bombay 400 020

T AND NOT A PROSPECTUS

l Computers facture Limited

der the Companies Act, 1956)
hmednagar Road, Pune 411 014
ee Marg, Ballard Estate, Bombay 400 038

ssue of 6,25,000 Equity Shares r cash at par.

	Rs.
	2,50,00,000
	75,00,000
at par for have been Internatioral J.K. ideration business tional iited	70,00,000
for cash at par loyees and ie Company and r such shares e Public Issue e been ees and working d to the Public that no person more than iall not be years from the -up	5,00,000
for cash at par ncial Institutions Investment Unit Trust of tion of India and n of India and e who have iall be allotted d the shares ibed for by the dded to the	37,50,000
for cash at par	62,50,000
	1,75,00,000

ICITORS & ADVOCATES

eford Bayley & Co.,
itors & Advocates,
Bank Annexe Building,
Street, Bombay 400 023

BANKERS TO THE COMPANY AND TO THE ISSUE

State Bank of India
State Bank Buildings, Bank Street
Bombay 400 023

United Bank of India
25, Sir P.M. Road, Bombay 400 001

Bank of India
70-80, Mahatma Gandhi Road,
Fort, Bombay 400 023

REGISTRARS TO THE ISSUE

Milan Investments Private Limited,
Bhupen Chambers, Dalal Street,
Bombay 400 023

UNDERWRITERS/BROKERS

A. UNDERWRITERS ONLY

The Industrial Credit & Investment Corporation of India Ltd. (ICICI), 163, Backbay Reclamation, Bombay 400 020. **Life Insurance Corporation of India (LIC),** Yogakshema, Jeevan Bima Marg, Bombay 400 020. **Unit Trust of India (UTI)** 13, Sir Vithaldas Thackersey Marg, (New Marine Lines), P.B. No. 2000, Bombay 400 020. **General Insurance Corporation of India (GIC),** Industrial Assurance Building, Churchgate, Bombay 400 020. **National Insurance Company Ltd. (NIC),** 3, Middleton Street, Calcutta 700 071. **United India Insurance Co. Ltd. (UIC),** 24, Whites Road, Madras 600 014. **State Bank of India (SBI),** Commercial Division (Advances), Bombay Main Branch, Bombay Samachar Marg, Bombay 400 023. **United Bank of India (UBI).** Oberoi Towers Hotel Building, Nariman Point, Bombay 400 021

B. BROKERS/UNDERWRITERS

Bombay

Bhupendra Champaklal Devidas, Bhupen Chambers, Dalal Street, Fort, Bombay 400 023. **Rasiklal Maneklal & Co.,** 16, Stock Exchange Building, Apollo Street, Bombay 400 023. **D.S. Purbhoodas & Co.,** Stock Exchange Building, Bombay Samachar Marg, Bombay 400 023. **Kaiki J. Khambatta,** Stock Exchange Central Building, 3rd floor, Bombay Samachar Marg, Bombay 400 023. **Porecha Brothers,** 19, Stock Exchange Building, Bombay Samachar Marg, Bombay 400 023. **Lewis & Jones,** Bank of Baroda Building, Bombay Samachar Marg, Fort, Bombay 400 023 **Valji Bhimji & Co.,** 24, Stock Exchange Central Building, Dalal Street, Fort, Bombay 400 023. **Jamnadas Morarjee & Co.,** 5A, Hamam Street, 1st floor, Post Box No. 961, Bombay 400 023 **V.B. Desai,** Bhupen Chambers, Dalal Street, Fort, Bombay 400 023 **L.K. Panday,** Bank of Maharashtra Building, 45/47, Apollo Street, Bombay 400 023. **Chimanlal J. Dalal & Co.,** 107, Stock Exchange New Building, Dalal Street, Fort, Bombay 400 023, **Batlivala & Karani,** Union Bank Building, Dalal Street, Fort, Bombay 400 023. **Merwanjee Bomanjee Dalal,** Allahabad Bank Building, Apollo Street, Bombay 400 023. **Prabhudas Lilladher,** Stock Exchange Building, 5A, Hamam Street, Bombay 400 023. **K.J. Shah & Sons,** 19, Stock Exchange Central Building, Bombay Samachar Marg, Bombay 400 023. **Jasvantlal Chhaganlal,** 29, Bhupen Chambers, 1st floor, 9/10, Dalal Street, Bombay 400 023. **Ishwarlal Kantilal & Co.,** Stock Exchange New Annexe Building, 5A, Hamam Street, Fort, Bombay 400 023. **Jayantilal Khandwala & Sons,** Room No. 6, Stock Exchange Building, 5A, Hamam Street, Bombay 400 023. **Virendra K. Patel,** 38, Bhupen Chambers, 9, Dalal Street, Fort, Bombay 400 023. **Indulal Amthalal Gandhi,** 53, Stock Exchange New Building, Apollo Street, Fort, Bombay 400 023. **Jamnadas Khushaldas & Co.** Stock Exchange Central Building, 2nd floor, Apollo Street, Fort, Bombay 400 023. **Kantilal Madhavdas & Co.,** 28, Stock Exchange Central Building, Bombay Samachar Marg, Bombay 400 023.

Ahmedabad

Champaklal Bhailal Chokshi, Manek Chowk, Near Share Bazar, Ahmedabad 380 001. **Gordhandas N. Gupta,** Anandji Kalyanji Building, Opp. Dhansuthar Pole, Relief Road, Ahmedabad 380 001.

New Delhi

Raja Ram Bhasin & Co., Jewan Mansion, 8/4, Desh Bandhu Gupta Road, New Delhi 110 055. **Vinod Kumar & Co.,** A-6, Connaught Place, New Delhi 110 001. **Bharat Bhushan & Co.,** H-45, Connaught Place, New Delhi 110 001. **Harbans Singh Mehta & Co.,** 33, Regal Building, Parliament Street, P.O. Box 300, New Delhi 110 001. **J.C. Mehta & Co.** 308, Dreamland, 1/18-B, Asaf Ali Road, New Delhi 110 002. **Amrit Lal Bajaj & Co.,** 606, Kailash, Kasturba Gandhi Marg, New Delhi 110 001. **Surinder Rode & Co.,** Post Box No. 2856, 1st floor, 21-B, Bara Bazar Marg, Rajinder Nagar, New Delhi 110 060.

Calcutta

Stewart & Co., Post Box No. 291, 14, India Exchange Place, Calcutta 700 001. **Place, Siddons & Gough (Private) Ltd.,** 6, Lyons Range, Calcutta 700 001. **Brijnath Khandelwal & Co.,** 13, India Exchange Place, Calcutta 700 001. **Khandelwal Bros.,** Wardley House, 25, Swallow Lane, Calcutta 700 001.

Bangalore

M. Nanjappaiah Jahgirdar, 205, K. Kamaraj Road, Post Box No. 4271, Bangalore 560 042. **Bhagya & Co.,** 139, Gandhi Bazar, Bangalore 560 004 **Alan J. Chaves,** 19/3, Cunningham Road, Bangalore 560 052. **L.K.S. Murthy & Co.,** No. 17, 3rd floor, Kempegowda Road, Bangalore 560 009.

Hyderabad

P.B. Afzulpurkar, 4-5-195, Sultan Bazar, Hyderabad 500 001.

Indore

Santosh & Co., 29, Dhenu Market, 1st floor, S.G.S.I.T.S. Road, Indore 452 003.

Madras

Paterson & Co., Post Box No. 48, Vanguard House, 3rd floor, 11/12, Second Line Beach, Madras 600 001. **Venkatraman & Co.,** P.B. No. 1510, Bombay Mutual Annexe, 165, Linghi Chetty Street, Madras 600 001. **Kothari & Sons,** Box No. 3309, Kothari Buildings, Nungambakkam High Road, Madras 600 034.

APPLICATION FORMS

Applications must be made for a minimum number of 50 shares or multiples thereof in the form accompanying the Prospectus and completed in full in English in accordance with the instructions contained in the Prospectus and in the Application Form.

Application Forms with copies of the Prospectus may be obtained from the Managers and Registrars to the Issue, Underwriters, Brokers and Bankers to the Issue named herein, from the branches of the Bankers to the Issue mentioned in the Application Form, or from the Registered Office of the Company.

Application Forms properly completed together with cash, cheque or bank draft for the amount payable on application must be delivered before the close of the subscription list to any of the Bankers to the Issue named herein or to any of their branches mentioned in the Application Form AND NOT to the Company nor to the Managers to the Issue, nor to the Registrars to the Issue.

ISSUE OPENS ON 22nd AUGUST 1979

ISSUE CLOSES ON 3rd SEPTEMBER 1979

OR EARLIER BUT NOT BEFORE 24th AUGUST 1979

ISSUE MANAGED BY

CIFCO
CHAMPAKLAL INVESTMENT & FINANCIAL CONSULTANCY LIMITED
Regent Chambers,
208, Ceremonial Boulevard,
Nariman Point, Bombay 400 021

Imageads ICIM 794

6½ per cent State Government Loans, 1989

	State	Amount of Loan (In crores of Rupees)
1.	Andhra Pradesh	21.75
2.	Assam	7.25
3.	Bihar	14.75
4.	Gujarat	20.25
5.	Haryana	9.75
6.	Himachal Pradesh	1.50
7.	Jammu & Kashmir	2.25
8.	Karnataka	17.00
9.	Kerala	17.00
10.	Madhya Pradesh	9.50
11.	Maharashtra	29.25
12.	Meghalaya	1.25
13.	Orissa	10.00
14.	Punjab	7.75
15.	Rajasthan	20.00
16.	Tamil Nadu	28.25
17.	Uttar Pradesh	38.00
18.	West Bengal	14.50
19.	Manipur	2.00
20.	Nagaland	2.75
21.	Tripura	2.00

The above loans will be issued at Rs. 100.00 per cent and will open for subscriptions on Saturday, 1st September 1979 and close on Monday, 3rd September 1979 or earlier without notice as soon as subscriptions approximate to the amount of each issue. All the State Governments reserve their right to retain subscriptions upto ten per cent in excess of the notified amounts.

The loans will be redeemable at par after 10 years i.e. on 1st September 1989 and interest will be paid half-yearly on 1st March and 1st September each year. Interest in respect of all loans will be liable to tax under the Income-tax Act, 1961. Interest on Government securities along with income in the form of interest or dividends on other approved investment will be exempt from Income-tax subject to a limit of Rs. 3,000/- per annum and subject to other provisions of Section 80L of the Income-tax Act, 1961.

The value of investments in the Loans now issued together with the value of other previous investments in Government securities and the other investments specified in Section 5 of the Wealth tax Act, 1957 will also be exempt from the Wealth tax upto Rs. 1,50,000/-.

Subscriptions may be in the form of CASH/CHEQUE.

Securities of the following loans will also be accepted AT PAR for conversion into the new loans of the respective State Governments :—

	Name of the loan tendered for conversion	Name of the new loan issuable
1.	5¾% Andhra Pradesh State Development Loan, 1979	6½% Andhra Pradesh State Development Loan, 1989
2.	5¾% Assam Loan, 1979	6½% Assam Loan, 1989
3.	5¾% Bihar State Development Loan, 1979	6½% Bihar State Development Loan, 1989
4.	5¾% Gujarat State Development Loan, 1979	6½% Gujarat State Development Loan, 1989
5.	5¾% Haryana State Development Loan, 1979	6½% Haryana State Development Loan, 1989
6.	5¾% Kerala State Development Loan, 1979	6½% Kerala State Development Loan, 1989
7.	5¾% Madhya Pradesh State Development Loan, 1979	6½% Madhya Pradesh State Development Loan, 1989
8.	5¾% Madras Loan, 1979	6½% Tamil Nadu Loan, 1989
9.	5¾% Maharashtra State Development Loan, 1979	6½% Maharashtra State Development Loan, 1989
10.	5¾% Mysore State Development Loan, 1979	6½% Karnataka State Development Loan, 1989
11.	5¾% Orissa Government Loan, 1979	6½% Orissa Government Loan, 1989
12.	5¾% Punjab Loan, 1979	6½% Punjab Loan, 1989
13.	5¾% Rajasthan State Development Loan, 1979	6½% Rajasthan State Development Loan, 1989
14.	5¾% Uttar Pradesh State Development Loan, 1979	6½% Uttar Pradesh State Development Loan, 1989
15.	5¾% West Bengal Loan, 1979	6½% West Bengal Loan, 1989

Interest for the half-year ending 31st August 1979 on the securities accepted for conversion, will be paid at the rate of 5¾% per annum at the time of issue of new securities.

Applications for *all the loans* will be received at the offices of the Reserve Bank of India at Ahmedabad, Bangalore bay (Fort and Byculla), Calcutta, Hyderabad, Jaipur, Kanpur, Madras, Nagpur, New Delhi and Patna.

Applications will also be received *at other places within the respective states as follows*:

(i) Branches of the Subsidiary Banks of the State Bank of India conducting Government treasury work except at Hyderabad and Jaipur;

(ii) Branches of the State Bank of India at places where there is no branch of its Subsidiary Banks conducting Government treasury work; and

(iii) In the case of Jammu and Kashmir loan, applications will be received at branches of the Jammu and Kashmir Bank Ltd., within the State of Jammu and Kashmir and branches of the State Bank of India where there is no branch of Jammu and Kashmir Bank Ltd.

Applications for Haryana and Punjab State Government Loans will also be received at State Bank of India, Chandigarh.

Securities will be issued in the form of Promissory Notes or Stock Certificates. The advantages of investing in the form of Stock Certificates are as under :—

(i) It is safer than a Government Promissory Note as the name of the holder is registered in the books of the Public Debt Office.

(ii) The Stock Certificate relating to application tendered at a branch of State Bank of India or its subsidiary bank will be sent to the applicant direct by registered post by the Public Debt Office.

(iii) The half yearly interest will be remitted to the holder direct by an interest warrant drawn at par on any Treasury or State Bank branch stipulated by the holder. If the holder so desires, the interest will be remitted by Money Order after deducting the commission charges.

(iv) If the holder wishes to sell his securities he can do so by signing the transfer form printed on the reverse of the Certificates in the manner prescribed therein.

(v) Government Promissory Notes in exchange for the Stock Certificate can be obtained by applying to the Public Debt Office and on payment of a nominal fee for each new note required.

Copies of the Notifications and Application Forms may be obtained from any of the Receiving Offices mentioned above.

In the event of over-subscription to the loan applied for, applicants tendering applications at the offices of the Reserve Bank of India at Ahmedabad, Bangalore, Bombay (Fort and Byculla), Calcutta, Hyderabad, Jaipur, Kanpur, Madras, Nagpur, New Delhi and Patna will be given the option of transferring their cash refunds to any other State Government loan which may still be open for subscription. To avail themselves of this facility, applicants should complete the "Special Option Form", copies of which can be obtained at any of the offices of the Reserve Bank of India mentioned above and tender the form alongwith their applications.

With Best Compliments

from

VISVESVARAYA IRON AND STEEL LIMITED

BHADRAVATI (KARNATAKA STATE)

We bring out the best in steel

700 grades of alloy and special steels

*High speed steel *Die steels *Stainless steels *Tool steels *Roller bearing steels, *Free cutting steels *Spring steels *Construction steels *Ferro-silicon *Ferro-molybdenum *Ferro-titanium *Ferro-boron.

A new head at the Fed

The fears the Mr Paul A. Volcker, the new chairman of the American Federal Reserve Board might push up interest rates too high to fight inflation and defend the dollar even at the risk of plunging the economy into a deep recession are likely to prove exaggerated, says the author. In spite of his conservative outlook there is no reason to believe that he will invite rather than combat the blight of a new economic slump with high joblessness.

Sudhir Sen

New York

IN THE last week of July, after keeping the nation and the world for days in nervous suspense, president Carter picked Mr Paul A. Volcker to be the new chairman of the Federal Reserve Board. The choice has been widely acclaimed, especially by the business and financial community. Another dollar crisis that was almost getting out of control was averted in the nick of time. The price of gold, which for some time has been acting as a sensitive barometer of confidence in the dollar, hastily retreated after soaring to an all-time high of $307. The dollar promptly reversed its slide, and Wall Street staged what has been called a Volcker rally.

There were, of course, good reasons for this widespread sense of relief. In an abrupt—and. according to a lot of people, arbitrary—reshuffle of his cabinet, president Carter had discharged the Treasury Secretary, Mr Michael W. Blumenthal, and chosen Fed chairman, Mr G. William Miller, as his successor. Mr Miller's nomination to the important Treasury post had a reassuring effect on business circles, both at home and abroad, since it more or less guaranteed that there would be no basic change in economic policies; that, above all, fight against inflation and defence of the dollar would continue to be the two topmost priorities; and that, in any event, there would be no undue intrusion of politics in the Treasury, nor any whittling of its responsibilities.

But what about the even more important vacancy Mr Miller had left behind at the Fed ? Would it be filled by a political nominee—more specifically, by Mr Frederick Schultz, a Florida banker and Mr Carter's staunch political ally and campaign fund-raiser, who had just received Senate confirmation as a Fed member and its vice chairman ? The danger of such a choice seemed all the more real because of the sudden transfer of Mr Miller, and even more so because the cabinet changes had the ominous appearance of being part of Mr Carter's advance preparation for re-election in the coming year. His young and aggressively loyal contingent from Georgia was more entrenched in the White House than before while Mr Hamilton Jordan, his trusted political lieutenant, was elevated to the position of Chief of Staff and endowed with wide powers—according to some, even over cabinet members. The White House is more and more taking on the look of a presidential campaign headquarters.

For a few days the uncertainty created turmoil in the financial markets. The dollar which was already suffering a sinking spell, took a nosedive, and the ground it had painfully recovered since November last against the German mark, Swiss franc, and Japanese yen was almost completely lost. Given this background, Mr Carter had no real choice. He had to pick someone who could immediately engender enough confidence in business circles, both at home and abroad, and thereby avert what was threatening to disrupt financial markets with worldwide repercussions. It did not take him long to single out Mr Volcker as the best man for the crucial Fed post at this critical hour. *Businessweek* magazine has summed it up neatly with the caption, "The dollar chooses a chairman".

reversed position

President Carter first considered Mr Volcker's name in November 1977 when he was looking for a successor to Dr Arthur Burns as Fed chairman. But he passed him over at that time because Mr Carter's preference was for a top-grade businessman of liberal persuasion rather than for a banker cast in a conservative mould. But events have forced him to reverse this position, and he has come full circle to cast his vote for a monetary hardliner from the banking world in preference to a more pragmatic and less orthodox businessman. The move has helped calm monetary fears abroad, which is a solid gain. But it is believed to have set the stage for future conflict between the Fed and the White House on the domestic front, especially if the economy slides into more than a mild recession.

Whatever the future may have in store, no one doubts that Mr Volcker, who is 51 years old, comes to the top Fed post with very impressive credentials. In the 1950's he was part of the so-called "brains trust" of Robert V. Roosa, a well-known money manager and financial expert, first at the New York Federal Reserve and later at the Treasury in Washington when Mr Roosa moved over there to serve as Under Secretary for Monetary Affairs in the Kennedy administration. In 1969, president Nixon appointed him, even though he was then a Democrat, to the same post, and in that capacity he served under three Treasury Secretaries-- David M. Kennedy, John B. Connally, and George P. Schultz.

backward step

By then the storm clouds had already gathered on the international monetary horizon, aided by the massive inflationary financing of the Vietnam war. In mid-August 1971, the inevitable happened — the dykes broke and the Bretton Woods system collapsed, the dollar was delinked from gold and sent afloat, a giant step was taken backward towards a plunge into monetary disorder. The malaise that followed was greatly aggravated by the flood of petrodollars that stemmed from the quadrupling of oil price in December 1973. The world is still struggling, so far with indifferent success, to cope with the post-Bretton Woods problems.

During those critical years Mr Volcker was not only an on-the-spot witness of the lugubrious trends, but an active player helping to formulate policies and to limit the damage. He has the unique distinction of having twice devalued the US dollar officially. He happened to be the primary technician behind the creation of special drawing rights at the International Monetary Fund, and later represented the US at the 1971 Smithsonian monetary conference which put its seal on the devaluation of the dollar and formally ended its convertibility into gold. The second devaluation came in 1973 which he negotiated singlehandedly, after secretly shuttling to capitals of all the major industrial nations.

In 1975, Mr Volcker, who had earlier done a stint of duty at the Chase Manhattan Bank, became president of the Federal Reserve Bank of New York, which is the most important of the Fed's twelve regional branches. By virtue of this position, he became an ex-officio member of the Open Market Committee, Fed's principal instrument for regulating the money supply through open market transactions, and came to acquire an influential voice on its policy, second in importance only to that of the Fed chairman.

Understandably, there has been a lot of speculation on the practical implications of the latest switch at the helm of the Fed. Since Mr Volcker has pronounced himself off and on in favour of monetary discipline and economic stability, how far will he go in tightening money ? And how high will he push up interest rates to bring inflation under control, especially at a time when the economy is softening and may already be in a recession ? The same question arises about dollar defence. Apart from market intervention, how much reliance will he place on tight money and high interest to achieve this goal ? In short, given the triple malaise of inflation, recession, and a sinking dollar, how exactly is he going to work out his policy mix?

probable course

Predictions in such matters are hazardous. Nevertheless, there are enough clues from which one could draw certain conclusions about the probable course Mr Volcker may be expected to chalk out for the Fed. He will almost certainly apply the monetary brakes at least moderately harder than the current chairman Mr Miller. Twice this year—in April and May—he voted for higher interest rates at the Open Market Committee, though the majority led by Mr Miller decided to keep them steady.

He will certainly be more circumspect with public pronouncements, knowing fully well that what he says from his vantage point can have immediate effects on the market-place and the future course of events. Mr. Blumenthal, however inadvertently, once "talked the dollar down". His belief that a lower-valued dollar would stimulate exports, curb imports and thereby help bridge the yawning trade gap was too simplistic for a complex, neo-mercantilist world. In the short run it could only widen the deficit and thereby further weaken the dollar. Besides, the signal he gave that the USA wanted a lower exchange rate for its currency, especially against the yen, set in motion a massive flow of funds from the dollar to the harder currencies. Later, he recognised the faux pas and struggled mightily to repair the damage. Yet, strangely enough, last month Mr Miller openly expressed the view that the Japanese yen at 220 to the dollar was too low and should rise to 200; and this at a time when the dollar, after a few months' pause, had resumed its nosedive! Mr Volcker is most unlikely to indulge in such public talks on so sensitive a subject.

misleading remarks

A year ago Mr Miller expressed his belief that the interest rates were about to peak and would begin to soften by year-end. They did not; instead, they went up. His uncalled-for remarks misled and annoyed a lot of people.

At the hearings on his confirmation as Treasury secretary, Mr Miller told the senators that the US economy was already in a recession. When the same question was put to Mr Volcker a couple of days later, he characteristically hedged and said he would have to wait for more evidence before giving a difinitive view. The word "recession" has disquieting implications in the public mind. A high-level pronouncement that the recession is already here can easily build up strong pressures in the Congress to apply premature remedies, especially tax-cuts, thereby aggravating budget deficits and inflation. This alone should counsel more discretion on the part of a Fed chairman in making public statements on a matter like this.

To take one more example, Mr Miller has repeatedly emphasised that inflation

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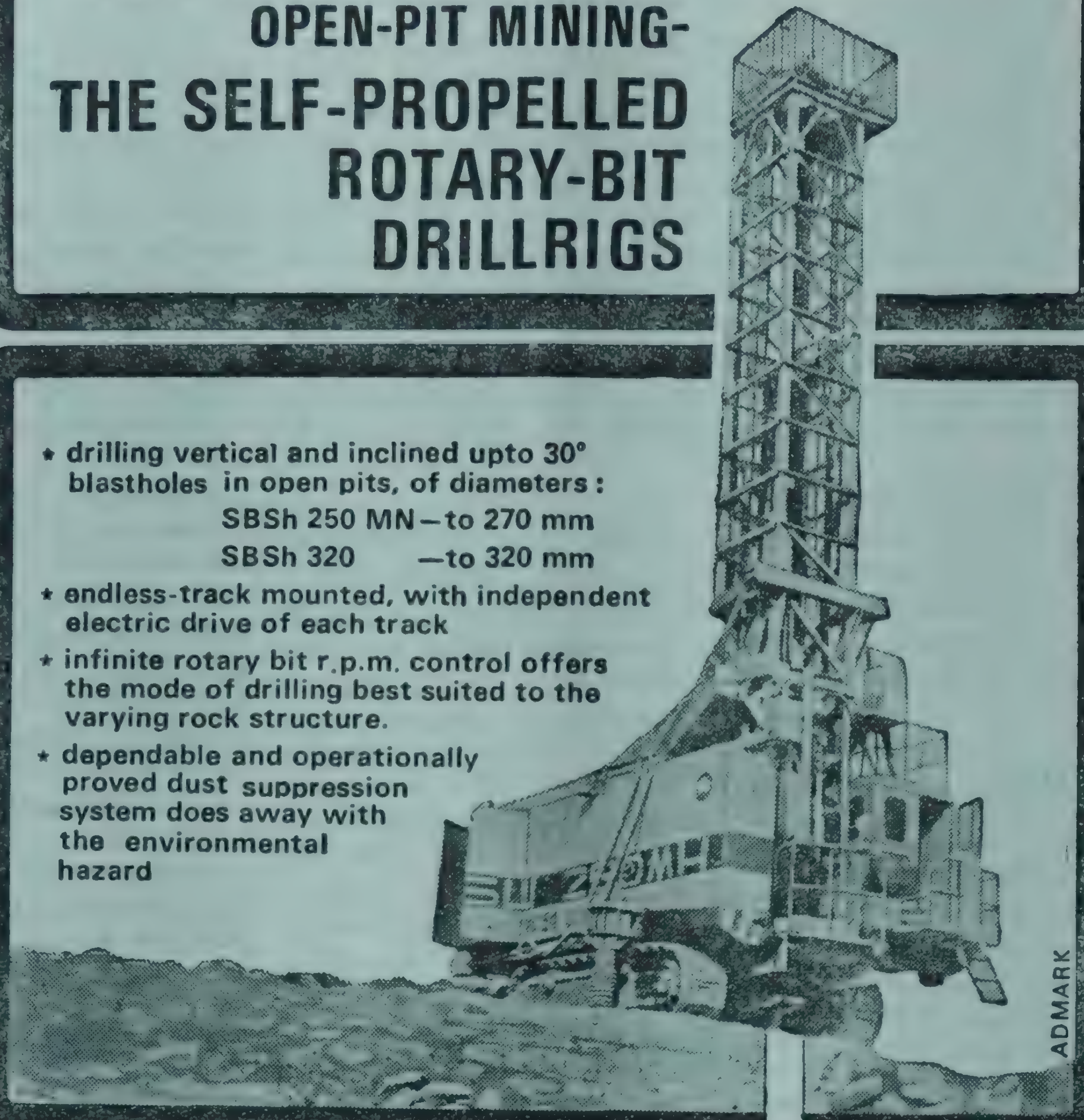
THE SELF-PROPELLED ROTARY-BIT DRILLRIGS

- drilling vertical and inclined upto 30° blastholes in open pits, of diameters:
  SBSh 250 MN—to 270 mm
  SBSh 320 —to 320 mm
- endless-track mounted, with independent electric drive of each track
- infinite rotary bit r.p.m. control offers the mode of drilling best suited to the varying rock structure.
- dependable and operationally proved dust suppression system does away with the environmental hazard



ADMARK

For further particulars write to the agent in India:

Khemka & Co. (Agencies) (P) Ltd.
"Shakespeare Court", 21A Shakespeare Sarani,
Calcutta-700017

Speedbird House, M. Block, Connaught Circus,
New Delhi-110001

or to

Trade Representation of the USSR in India,
Nyaya Marg, Chanakyapuri,
New Delhi-110021

MACHINOEXPORT
☎ 147 15 42 ✉ SSSR MOSKVA 117330 MOSKVA V-330 MACHINOEXPORT 7207

is the nation's number one enemy, but that it would take a long time—five to six years of sustained effort—to bring it down from its present double-digit height to a more tolerable level of, say, 2 to 3 per cent. His warnings were no doubt well meant, and they may also be substantively valid. Yet what he overlooked is the fact that they feed the people's inflationary expectations; and as they act accordingly, they add more fuel to the inflation and thereby make the task of subduing it even more difficult. This may very well be the reason that impelled Mr Volcker to state that he would act to bring down the rate of inflation "quickly", although he did not spell out what concrete steps he would take towards that end.

All this points up a simple truth: openness in a central banker is less of a virtue than being tight-lipped. No wonder that in the esoteric world of money and banking we see its leaders move so warily, mostly wearing a poker face as if it has become second nature with them.

In confirmation hearings before the Senate Banking Committee, Mr Volcker stressed that he would maintain his independence of the Carter administration and predicted that there would inevitably be conflicts with it, but he also added that he had apprised Mr Carter of his position which he "understood".

Should the Fed lower the interest rates and loosen its grip on money supply to forestall a recession ? Mr Volcker has a clear, one-line reply : "You cannot reflate yourself out of a recession." Should there be a tax-cut ? Again, he does not see the need for it, at least for now. However, if the economy continues to operate weakly, it might be necessary. he concedes; and if it did, it should emphasize elements that would reduce inflation and increase investment. Here his views are identical with those of Mr Miller.

The oft-expressed fears that Mr Volcker might push up interest rates too high to fight inflation and/or to defend the dollar even at the risk of plunging the economy into a deep recession and thereby get into a collision course with the White House, are likely to prove exaggerated. In spite of his somewhat more conservative outlook, there is no reason to think that he will invite rather than combat the blight of a new economic slump with high joblessness.

In fact, with Mr Volcker at the Fed's helm one may expect some welcome initiatives in the international monetary field. Though he was an architect of the floating dollar policy in 1971, he was also one of the first to recognize the dangers of dislocations in the foreign exchange markets and their deleterious effects on the world economy. And so he tried, with two formal dollar devaluations, to forge a new system based on floating rates. Since then things have gone from bad to worse with wide swings in the value of the dollar and other major currencies. It is more than conceivable that Mr Volcker will, sooner or later, try to tackle the pressing problem of evolving a semblance of order out of the present chaotic state of international monetary relations. And with the background of his past experience, and the network of personal contacts he established in the early seventies with the financial leaders of the western world, including chancellor Helmut Schmidt and president Giscard d'Estaing, he is, indeed, ideally placed to do so.

Small-scale sector : barriers to growth

Subhash J. Rele

Although the development of small industries is the major plank of the government, these units find themselves in doldrums. Out of 500,000 registered units nearly 8,000 have gone on the sick list. The author feels that lack of an integrated approach has been responsible for inadequate inplementation of government policy. He pleads for a proper assessment of the potential of local manpower and resources and creation of infrastructure.

SO MUCH has been said so often about the role of small-scale sector in the nation's development that it is redundant to re-emphasise the value of its meaningful contribution. A lot of sympathy is wasted these days on this sector. Government protection and subsidies cannot ensure the success of small units for long, though these are essential in the initial stages. At the moment, government is busy setting up several institutions to help the small-scale sector management in the techniques of production and marketing. However, these institutions have their own limitations, and when it comes to doing justice to the various problems experienced by them, the protection given seems inadequate.

No wonder new units in the small-scale sector are coming up at a halting pace in the face of growing shortages and high prices of essential raw materials. One major drawback in the growth of the small-scale industries is that they have grown in an unplanned manner, without any reference to our developmental needs. Numerous incentives and facilities made available to the small-scale industries are grossly misused and have generated a class of wheeler-dealers often acting as nominees of some large industrial houses whose growth is sought to be curbed.

A small unit needs a blend of entrepreneurial and managerial expertise if it has to be successful. Apart from the constraints on resources in terms of money, manpower and know-how, running a small unit is perhaps more difficult than managing a big unit. Suggestions made some time ago about setting up small units by groups of small entrepreneurs, wherein each member would be conversant with one discipline is most welcome. Thus one may think of forming a combine comprising a technician, a marketing man, a person knowing intricacies of financial management etc. For many years now and especially in the last decade or so, the government has, as a policy, encouraged the growth of small industries. Yet the draft sixth Plan has revealed that the share of small industries in terms of value-added in industrial production has declined from 19.5 per cent in 1968 to 16.1 per cent in 1976. This, however, underlines the need for promoting the growth of small industries systematically, if the government policy is to be a success.

Although the development of small industries is one of the major planks of the present government's economic policy, such units today find themselves in doldrums. According to a study made by the Reserve Bank of India, out of the 500,000 registered small-scale units nearly 8,000 have fallen sick. Unofficial estimates place the incidence of sickness even higher. The phenomenon of shortages and high prices has been particularly marked lately in the case of raw materials like steel, aluminium and copper, soda ash and paraffin wax. This is attributed to shortfalls in indigenous production, escalation in the prices of some of the imported materials and the unfavourable distribution and pricing policies followed by the canalising agencies.

relevant suggestion

In view of the heightened emphasis being placed on the development of small-scale sector, the Chakradhari panel has appropriately suggested that the small industries development organisation at the centre should function almost as a small industries development authority so that its writ could work. Recommendations regarding strengthening the infrastructure for small industries—provision of consultancy and finance, marketing of their products, etc. need to be closely studied. Equally wholesome is the recommendation of the committee that a small industries development bank should be set up immediately at the centre to provide refinance facilities to financial institutions and banks to cover risk, service export credit requirements, monitor the disbursal of credit and provide funds to state corporations for development of land, construction of sheds, etc. at four per cent interest.

Regular flow of supply of raw materials in full quantities is one of the essential requirements for the development of any industry, and more so in the case of small industries which cannot afford to close down even for a few days. Instances are not lacking where big industries, despite the numerous procedures, manage to get a lion's share from the central government allocations, compelling the small-scale units to purchase their requirements from outside at a high premium. Second, small-scale units normally pay high prices for their raw materials since they buy in small lots and often times through intermediaries. The ability of the small-scale units to improve their market efficiency would depend upon their success in getting raw materials at about the same prices at which large-scale manufacturers get theirs.

procedural delays

There is a view that the small industries must get a package deal guarantee supply of the required raw materials, technical know-how, loans, marketing assistance, etc. Procedures and formalities should be simplified as far as possible as part of the package. It is conceivable that the number of small units will rise in the coming years if the government implements its new industrial policy with eagerness and determination. This implies a rise in the total financial requirements of the small-scale sector. It is wrong to presume that the banking industry is incapable of meeting the growing requirements of the small sector. Most of the so-called complaints of the small sector against the banking industry are due to the failure of the former to meet the procedural requirements of the latter.

Small-scale units have no organised marketing outlets, internal or external. The question is: Can this sector, as it expands, afford to ignore the market demand, market changes and marketing outlets? It is common knowledge that small-scale units are predominantly proprietary and the owner looks after manufacturing, management and marketing. If any decision relating to the line of production, manufacturing process, choice of inputs, selection of marketing channels goes wrong, the consequences are disastrous. Provision of effective marketing facilities is as important in the development of small-scale industries as provision of capital and raw materials.

Many techniques and methods are talked about. It is suggested that consortia approach where few like-minded persons can come together and market their products under one brand name is an ideal one. One of the main recommendations of the Administrative Reforms Commission was that, show-rooms should be opened in all the major towns, both within and outside the state, where the products of the small-scale units could be exhibited.

It is true that the wide ranging assistance extended by the various government agencies to the small-scale sector has enabled it to diversify the pattern of production, leading to quantitative growth. It is time to bring a sense of direction to all our efforts and weave the various aspects of the development into a plan of action.

package incentives

While addressing the Northern Regional Convention of Small Industry, Mr L.K. Jha, governor of Jammu & Kashmir, stressed the need for evolving a package of unified simplified incentives rather than rushing to instant solutions. According to him equalisation of prices of raw materials at different places could tend to be a disincentive in setting up industries based on locally available materials. He also suggested the creation of supply contractor as an intermediate stage for promoting entrepreneurship. Asserting that finance was no longer much of a problem, he wanted greater attention to be paid to the problem of marketing and development of entrepreneurship. But entrepreneurship, he felt, could be developed over a period.

Right now, we should concentrate on intermediate stage of developing supply contractors who will arrange the manufacturing and supply of products of particular specifications. Here one must state that lack of integrated approach has been responsible for inadequate implementation of government policies. Again, competition from large and medium industries continues in areas reserved for small scale sector. Many areas allotted to it are beyond its scope in view of the scale of investment involved. It has been our experience that growth cannot be ensured without a proper assessment of the potential of local manpower and natural resources, utilisation of end-products and without the creation of necessary infrastructure.

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Credit management on a model dairy farm

Amrik S. Saini, Raj Vir Singh and R.K. Patel

Dairying with crossbred cows is a paying and sound proposition, say the authors, who belong to the Division of Dairy Economics, Statistics and Management of the National Dairy Research Institute, Karnal. With the existing resources of the farmers, it is not possible to introduce high yielding crossbred cows. The authors urge the financing agencies to liberally finance the medium-term and short-term loans to dairy farmers at a reasonable rate of interest.

INDIAN DAIRY industry spreads over the sub-continent in countless, unorganised small units with a cattle herd composed mainly of nondescript animals.[1] Farmers in India have always preferred crop farming to dairy farming for a combination of subsistence and economic resources. Numerically the cattle wealth of the country is highly impressive. India has about one-half of the world's buffalo and one-fifth of the world's cattle population but the productivity performance is poor and far from economical. The annual average milk yield of Indian cow is 157 kg and that of the buffalo 504 kg. whereas the improved cows in such countries as Denmark, the USA, Britain, Switzerland, New Zealand and Israel produce milk more than 20 times that of Indian cow and over seven times that of buffalo.[2]

insufficient production

With the adoption of new technology significant advances have taken place and great success has been achieved in the production of foodgrains in the country, but progress in the field of milk production has not been substantial. The milk production in the country has increased from 17.5 million tonnes in 1950-51 to 27.5 million tonnes[3] in 1977-78.[4] The current milk production is insufficient to meet both the economic and nutritional demand in question.[5] The consumption of milk in the country is only 110 gms per day per capita as compared to 617, 499 and 485 gms in New Zealand, USA and Denmark respectively. Majority of our population is vegeterian and their diet is deficient in animal proteins as per capita consumption of milk is miserably low.

The latest technological developments in milk production, procurement and processing industry offer better prospects for all sections of rural people. Additionally, dairy exterprise is especially suited to the weaker sections of the rural households with small land base and abundant labour force.[6] As such, increase in productivity of dairy enterprise is bound to be shared by these less fortunate sections of the farming community. Progressive dairying would, thus help to achieve what has not been

TABLE I
Normative Requirements

1.	Lactation yield (Litres)	3000
2.	Lactation length (days)	300
3.	Intercalving period (months)	15
4.	Age at first calving (months)	30
5.	Green fodder	Ad. Lib
6.	Dry fodder/animal/day (kgs)	1.50
7.	Concentrates/animal/day (kgs)	1.00
8.	Veterinary medicines (Rs)	50.00
9.	Female, male calf ratio	50:50
10.	Appreciation in the value of female calf of one year (Rs) (Male sold free of cost)	800
11.	Mortality (% age)	20
12.	Milk fed per female calf (litres)	200
13.	Price of milk per litre (Rs)	1.30
14.	Dung value (Rs)	80.00
15.	Insurance premium on animal value (%age)	5
16.	Depreciation by straight line method on :	
	i) Animal value (%age)	8
	ii) Equipment (%age)	10
	iii) Buildings (%age)	18
17.	Rate of interest (%age)	14
18.	Family living expenses per month (Rs)	450
19.	Repayment plan	Monthly
20.	Land rent per acre (Rs)	500
21.	Three acres of land will be sufficient to provide green fodder ad. lib. to 10 crossbred cows and their followers throughout the year.	
22.	The female calves ageing one year will be sold each year whereas male calves will be disposed of free of cost.	
23.	Green Fodder Rotations throughout the year under north Indian conditions.[7]	
	a) Maize+Cowpea, Maize+Cowpea+Teosinte, Berseem +Mustard.	
	b) Maize+Cowpea, Jowar+Guar+Mustard, Oats+Pea.	
	c) Sweet Sudan+Cowpea (three cuts), Berseem+Oats.	
	d) Maize+Cowpea, Maize+Cowpea, Maize+Cowpea, Oats+Mustard.	
	e) Sweet Sudan+Cowpea (three cuts), Mustard, Oats+ Pea (Two cuts).	

possible to do through the spread of green revolution for the small and marginal farmers and for landless labourers. A recent development in dairying is cross-breeding programme which promises high milk yield potential and profit. Milk production, therefore, offers an excellent opportunity to the farmers for incorporating this enterprise in their farm plans for higher incomes.

When dairying is practised on scientific and commercial lines with the crossbred cows, it becomes relatively more capital intensive enterprise as compared to the usual crops or dairy enterprise. The investment in the dairy enterprise is needed for purchasing the costly cross-bred cows, construction of modern cattle sheds and acquiring the dairy equipment. For scientific feeding and management practices these animals require heavy expenditure for maintenance purposes. Farmers who hardly have any savings, cannot finance such heavy investment from their owned resources. Therefore, for the development of dairy enterprise, it is essential that the financing institutions should come forward unhesitatingly to advance medium-term and short-term credit for the adoption of this enterprise. For this purpose, the financing institutions need reliable estimates on capital and credit requirement for different purposes and the input-output relationship. Therefore, to help the financing institutions and the farmers, an attempt has been made in this article to demonstrate the item-wise capital requirement and its economic feasibility for a unit of 10 cross-bred cows under a set of normative requirements under north Indian conditions (Table I).

Table II shows that for establishing a dairy farm Rs 44850 are needed as fixed capital investment out of which about two-thirds are required to purchase the milch animals. The other items of the investment in this category are construction of building and purchasing the equipment. Such a heavy investment is very difficult to be financed by the farmer himself and, therefore, the financial institutions should advance medium-term loan for this purpose.

Alongwith the fixed capital investment (medium-term loan) the farmer would need working capital (short-term loan) for the day to day expenses for meeting out the maintenance cost. An estimate of the working capital requirement for the above mentioned dairy unit is given in Table III.

As dairy enterprise generates regular monthly income, so cash expenses will be involved for incurring variable expenditure for a period of one month on recurrent basis- The working capital woulc thus be equal to the cash expenses over period of one month only which work out to be Rs 3500. Thus in addition t medium-term loan (fixed capital) o Rs 44850 the farmer also needs a short term loan of Rs 3500 for starting hi dairy business.

The financial institutions can financ such an amount only if these meet th economic feasibility criteria. For thi

TABLE II

Medium-term Dairy Loan for 10 Cross-bred Cows

Particulars	**Amount (Rs)**
1. Livestock	
i) Cattle @ Rs 3000/- each	30,000
2. Building	
a) Cattle Shed	
i) Covered shed with asbestos sheets	2,250
ii) Open yard with paved ground, with bricks and boundary walls	3,600
iii) Calf pens	1,400
b) Hutments	1,500
c) Stores	1,500
d) Shed for chaff cutter and equipment etc.	600
e) Equipment (Chaff cutter, hand pump, electric motor, milking pails, cans, cycle etc.)	4,000
Total (Excluding land value)	44,850

TABLE III

Short-term Loan for 10 Cross-bred Cows

Particulars	**Amount (Rs)**
1. Inputs for green fodders	2000
2. Dry fodders	903
3. Concentrates	4,015
4. Milk for female calves	1,040
5. Labour	6,000
6. Veterinary Charges	500
7. Interest on working capital @ 14%	140
8. Miscellaneous	1,000
Total	15,598
Variable cost for one month	1,300
Insurance	1,500
Family expenses for one month	450
Other expenditure for one month	250
Total Working Capital (short-term loan)	3,500

purpose, the input-output relationships, repaying capacity and repayment plan for the above mentioned cross-bred cow unit must be examined.

As the medium-term loan advanced by financial institutions is to be repaid within a period of five years the profitability of dairy unit is examined for this period (Table IV). Dairying is quite a paying profession as it generates sufficient return over cash cost and net returns.

Before advancing a loan, every lending institution has to get itself satisfied that the loan will generate sufficient income which can repay the loan along with the interest as it falls due. Sometimes the loans are productive but the income generated by them is insufficient to make repayment of principal and interest. Therefore, alongwith the input-output analysis, the repayment capacity of the

TABLE IV

Economics of 10 Cross-bred Cows Over a Period of Five Years

Particulars		I Year	II Year	III Year	IV Year	V Year
I. Gross Returns						
a) Sale proceeds from milk		39000	31200	31200	31200	31200
b) Dung value		880	880	880	880	880
c) Appreciation on one year of female calves		3200	3200	2560	2250	2560
d)	Total	43080	35280	34640	34640	34640
II. Variable Cost						
a) Inputs for green fodder		2000	2000	2000	2000	2000
b) Dry fodder		903	903	903	903	903
c) Concentrates		4015	4015	4015	4015	4015
d) Milk for female calves		1040	1040	1040	1040	1040
e) Labour		6000	6000	6000	6000	6000
f) Veterinary charges		500	500	500	500	500
g) Interest on short-term loans		245	—	—	—	—
h) Miscellaneous		1000	1000	1000	1000	1000
	Total	15703	15458	15458	15458	15458
III. Returns to fixed farm resources (I—II)		27377	19822	19182	19182	19182
IV. Fixed Costs						
a) Depreciation on animals		2400	2400	2400	2400	2400
b) Depreciation on equipment		400	400	400	400	400
c) Depreciation on buildings		1085	1085	1085	1085	1085
d) Interest on investment		6279	6279	6179	6279	6279
e) Insurance premium		1500	1380	1260	1140	1020
f) Land rent		1500	1500	1500	1500	1500
	Total	13164	13044	12924	12804	12684
	Total cost (II+IV)	28867	28502	28382	28262	28142
V. Net Income (III—IV)		14213	6778	6258	6378	6500
VI. Return over cash cost (III—IV e & f)		24377	16942	16422	16542	2520

TABLE V

Repaying Capacity and Repayment Plans of a Dairy Farm with 10 Cross-bred Cows

Particulars	I Year	II Year	III Year	IV Year	V Year
Returns over cash cost (Rs)	24,377	16,942	16,422	16,542	16,662
(—) Family living expenses (Rs)	5,400	5,400	5,400	5,400	5,400
(—) Short-term loan *(Rs)	2,000	—	—	—	—
Repaying Capacity (Rs)	16,977 (1414.75)	11,542 (961.83)	11,022 (918.50)	11,142 (928.50)	11,262 (938.50)
Repayment Plans (Rs)	16,977 (1414.75)	10,924 (910.33)	10,924 (910.33)	10,924 (910.33)	10,924 (910.33)

*Short-term loan is of Rs 3500. While working out return over cash cost Rs 1500 as insurance premium has already been deducted.

Note : Figures in parenthesis show monthly repaying capacity & repayment plans.

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borrowers must be examined which is worked out as under and is also given in Table V.

Repaying capacity = Gross income—(living expenses + Working expenses + Taxes + Other loans + Repayment due).

The repaying capacity works out to be Rs 16977, 11542, 11028, 11142 and 11262 during the respective years of the five year plan. The repaying capacity is more during the first year as compared to other years because all the milch animals are newly calved at the start of dairy business and these are to complete their full lactation during this period. The repaying capacity is also worked out month-wise and it is Rs 1415, 962, 919, 929 and 939 for each month of the respective years of the five year plan.

A good repayment plan is essential for facilitating the repayment capacity of the farmer. A dairy farmer might have a good repaying capacity, but a defective repayment plan would render it insufficient. Keeping in view the above criteria, repayment plans are worked out for five years (Table V). As dairying is started with newly calved cross-bred cows, there are higher returns during the first year. This results into high repaying capacity during the first year which facilitates the comparative low repaying capacity in the succeeding years to match with repayment plans. It is observed, therefore, that farmers would be in an easier position to repay the loans within the specified period.

Dairying with cross-bred cows is a paying and sound proposition. It is high time, therefore, for the farmers to incorporate this enterprise into their farm business. However, with the existing resources of the lower ladder, it is not possible for them to introduce high yielding cross-bred cows in their farm organisation. Therefore, to help the poor section of our country in reaping the benefit of cross-bred cows, the financing agencies should come forward for liberal financing of medium-term and short-term loans at a reasonable rate of interest.

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3. T. Narayanan: "Policies and Projections on Dairy Development under medium Term Plan (1978-83)", Keynote address delivered at the Senior Dairy Husbandry Officers' Workshop at NDRI, Karnal, January 7, 1978 (Mimeographed).

4. During the same period, the newly adopted improved farm technology has increased total wheat production from about 7.0 million tonnes in 1951 to about 30 million tonnes in 1977-78.

5. The total milk production in the country is 27.5 million tonnes. The economic demand for milk refers to 1978-79 and is estimated to be about 38 million tonnes on the basis of projected population growth rate of about 2 per cent during 1971-79 contemplated income growth rate of 5.5 per cent per annum and an income elasticity of 1.6 for milk. And if the recommended nutrition allowance of 210 gms per capita per day was to be made available by 1978-79, the production requirement of milk would be 48.5 million tonnes for feeding the projected mid-year population of about 63.3 crores. See: Rao, G.V.K.: "Dairy Developments, Rural Income and Employment—A Planning Approach "*Indian Dairyman,* 30 (2): 1978 : 90, Approach paper on "Development of Animal Husbandry and Dairying during Fifth Five Year Plan" and Govt. of India; "Dairy Hand Book", NDRI, Karnal, 1977.

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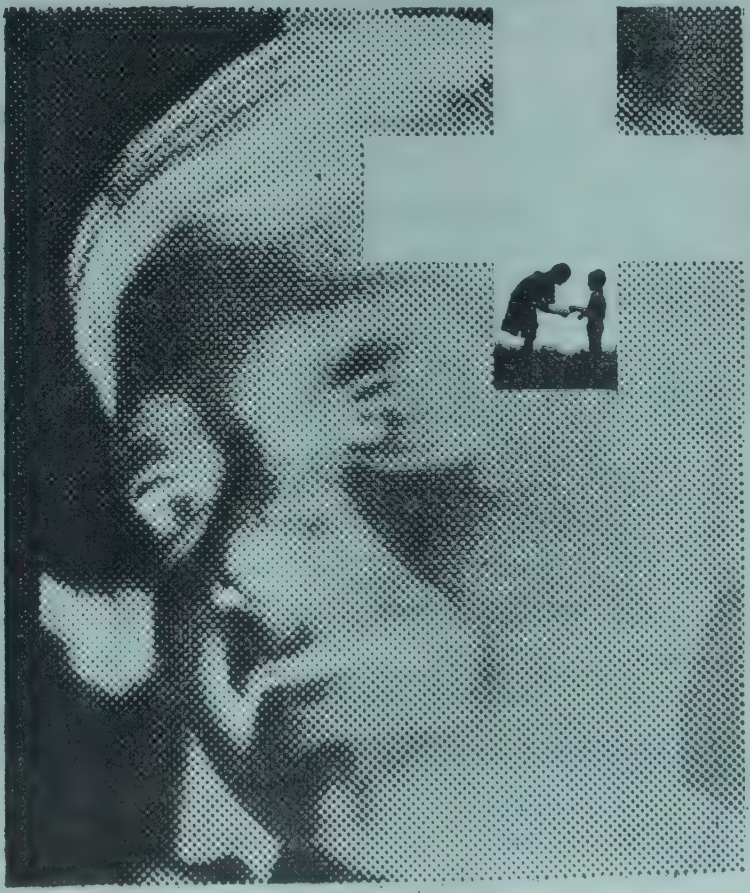

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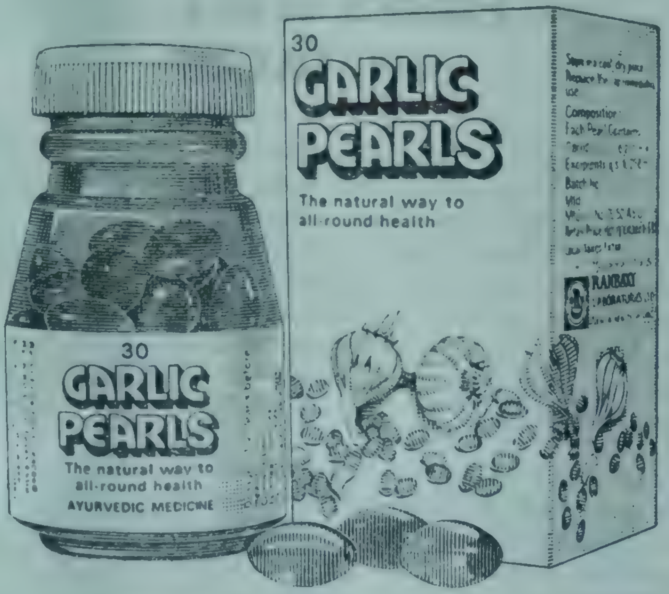
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TRADE WINDS

Assocham Chief on Economic Situation

The Economic situation in the country today is marked by strains of an exceptional nature with inflationary trends alarmingly manifest and severe infrastructural deficiencies threatening to disrupt economic growth. This was stressed by Mr A.L. Mudaliar, president of the Associated Chambers of Commerce and Industry (Assocham), at a press conference at Madras. He added, "Escalating energy costs and worsening of terms of trade are imposing relentless pressures on our resource base". However food and foreign exchange situation, he said, were reassuring.

Mr Madaliar claimed that it was the corporate sector that had played a valuable and constructive role in promoting the usages of fertilizers and pesticides and that this had contributed in no small measure to the comfortable food situation existing in the country today. It was the corporate sector which had contributed substantially in widening the use of farm machinery such as tractors, irrigation pumpsets etc which had helped agricultural productivity in the country.

Mr Mudaliar contented that volume rate of industrial output had also steadily picked up from 1975 although substantial amplitudes still persisted. While capital formation in real terms had progressed at 10 per cent per annum in the last five years, capital to output ratios were still far from satisfactory.

Listing difficulties faced by industry today, Mr Mudaliar said substantial shortfalls in power supplies, inadequacy of the railway system, stagnating coal production and congestion at major ports, had all contributed to loss of output and productivity. He said Assocham had commissioned in-depth studies on such structural bottlenecks and their economic impact with a view to evolving suitable recommendations for action plans, both short and long term.

Mr Mudaliar pleaded for corrective actions so that expansion of bases of capacities were undertaken as a necessary concomitant.

Mr Mudaliar said the industrial relations bill was necessary to stabilise the economy and making the climate attractive for entrepreneaurs.

Central Cabinet

Portfolios have been allocated to all the 17 ministers of state included so far in the Central Council of Ministers. The following is the complete list of these ministers along with their portfolios :

MR BHANU PRATAP SINGH: Rural Reconstruction.

MR JANESHWAR MISHRA: Shipping and Transport.

MR T. S. SHRANGARE: Communications.

MR NAR SINGH : Communications.

MR B. RACHAIAH: Industry.

MR A. PRASAD RAO: Tourism and Civil Aviation.

MR BEDABRATA BARUA: External Affairs.

MR NATHURAM MIRDHA: Agriculture.

MR M. V. KRISHNAPPA: Agriculture.

MR P. M. SAYEED: Steel, Coal and Mines.

MR KISHORE CHANDRA S. DEO: Steel, Coal and Mines.

DR HENRY AUSTIN: Commerce and Civil Supplies

MR SOUGATA ROY: Petroleum, Chemicals and Fertilizers.

MRS RASHIDA HAQ CHAUDHURY: Education, Social Welfare and Culture.

MR K. GOPAL: Parliamentary Affairs-

MR JAGBIR SINGH: Defence.

MR DHANIK LAL MANDAL: Home.

The list of the 19 cabinet ministers along with their portfolios was published in the Records and Statistics section of this journal on August 3, 1979.

The union cabinet is expected to be strengthened further shortly if the prime minister, Mr Charan Singh, succeeds in securing a vote of confidence in Lok Sabha on August 20.

New Cabinet Subcommittees

The prime minister, Mr Charan Singh, has reconstituted the cabinet sub-committee on Economic Affairs. The seven-member sub-committee, headed by Mr Charan Singh, includes the deputy prime minister, Mr. Y.B. Chavan, the Finance minister, Mr H.N. Bahuguna, the Agriculture and Irrigation minister, Mr Brahm Perkash, the Steel and Mines minister, Mr Biju Patnaik, the Industry minister, Mr K. Brahmananda Reddy and the Labour minister, Mr Fazlur Rehman.

A sub-committee on Agriculture and Rural Reconstruction has been constituted under the chairmanship of Mr Charan Singh. Its members are Mr Y.B. Chavan, Mr H.N. Bahuguna, Mr Brahm Perkash, Mr C. Subramaniam, and minister of state in charge of Rural Reconstruction, Mr Bhanu Pratap Singh.

A third sub-committee on Parliamentary Affairs, is headed by Mr Chavan and has as its members the Law minister, Mr S.N. Kacker, the Energy minister, Mr K. C. Pant, and the minister of state for Parliamentary Affairs, Mr K. Gopal. The Planning Commission, deputy chairman, Prof. D. T. Lakdawala, will be a permanent invitee to the sub-committee on Economic Affairs and on Agriculture and Rural Reconstruction.

Prime minister, Mr Charan Singh, has also set up a six-member committee on Political Affairs for taking major policy decisions. Besides Mr Charan Singh, the committee consists of the deputy prime minister, Mr Y.B. Chavan, the Finance minister, Mr H. N. Bahuguna, the minister for External Affairs, Mr S. N. Mishra the Steel minister Mr Biju Patnaik and the Defence minister, Mr C. Subramaniam. This is the most important cabinet committe Mr Charan Singh has set up so far.

Caprolactum Price

The Gujarat State Fertliser Company (GSFC) has increased the price of caprolactum by Rs 840 per tonne. In view of the increase in the price of benzene and its corresponding impact on the cost of production of caprolactum GSFC has raised the basic price of caprolactum to Rs 21,774 per tonne, excluding packing charges. Earlier, the price of caprolactum was Rs 20,934 per tonne without packing charges. The revised price came into force with effect from August 6, 1979. The landed cost price of imported caprolactum is around Rs 27,000 per tonne. This means the indigenous caprolactum is still selling cheaper in the country.

Appraisal of Overseas Projects

All Indian projects abroad with an investment of over Rs 20 crores, belonging both to the public and private sectors, will henceforth be subjected to an "exhaustive appraisal" by the high-power Overseas Project Development Committee. This decision was taken at the first meeting of the committee held on July 28. It will also keep track of the progress of all overseas projects with an investment of over Rs 1 crore. Subsequently, these projects are expected to be brought under the system of comprehensive review devised by the committee.

The committee, which was constituted by the government recently, is functioning as the official agency for one-point clearance of all issues relating to project exports which are dealt with by different departments. It has decided to conduct immediately two case studies of large projects abroad, with a view to identifying the constraints in the way of promotion of Indian ventures abroad and also the operational inadequacies of existing projects. Country-wise studies will be taken up by the committee later.

An anlysis, sometime back, by the Commerce ministry revealed that of the 350 investment proposals approved by the government up to the end of March 1979, as many as 130 remained unimplemented while 23 projects were abandoned.

Excise Exemption for Polypropylene

The government has issued notifications exempting the following items from the whole of the duty of excise: (i) Polypropylene tape used in the manufacture of polypropylene fabrics and intended for making sacks. (ii) Polypropylene monofilament yarn of 60 deniers and above. (iii) Polypropylene waste arising during the manufacture of polyprpoyleve tapes.

The plastic industry, specially the small-scale sector had been pleading for the withdrawal of excise duty on polypropylene for a long time. In view of the high price of polypropylene after adding the excise duty, the plastic processors tended to shift over to processing high-density polyethelene (HDPE) into monofilaments and tapes, although polyprpylene was the more suitable raw material.

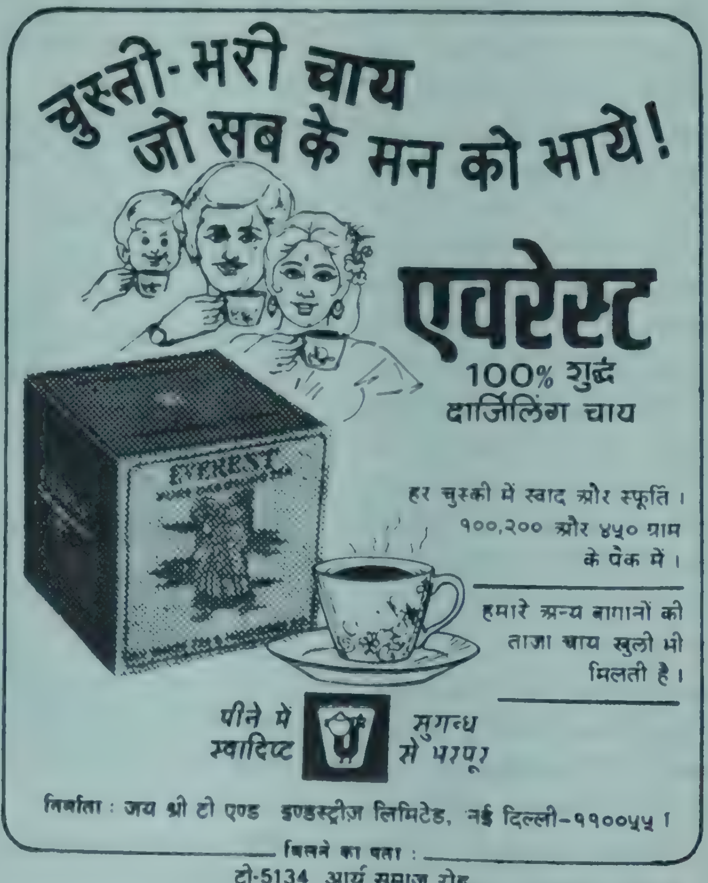
Aluminium Import Duty Waived

The government has decided to waive the customs and the countervailing duty on imported aluminium so long as the c.i.f. price of imports is higher or equal to that of the indigenous metal, inclusive of excise duty. This decision has been taken in view of a substantial gap between indigenous production and the estimated demand for 1979-80. However, the production outlook for the current year is encouraging. The output is estimated at 250,000 tonnes last year, giving a growth rate of about 20 per cent for the second year in succession. With the demand for aluminium estimated at 325,000 tonnes this year, the shortfall is expected to be 75,000 tonnes. The entire gap may be met by imports.

The Minerals and Metals Trading Corporation (MMTC), a canalising agency for aluminium imports since May last, has started making arrangements for 75,000 tonnes this year. It has already entered into contract for the import of 10,000 tonnes of CG grade and 10,275 tonnes of EC grade aluminium. Besides, Bharat Aluminium Company Ltd (Balco) has contracted for 15,100 tonnes, of which 5,850 tonnes have already arrived.

Import of Paper Machinery

The government had announced certain guidelines with regard to the import of second hand paper machinery by small and medium entrepreneurs vide their press note dated December 28, 1974, as amended from time to time. It was indicated therein that the import of second-hand machinery would be allowed within certain limits which were calculated with reference to the foreign exchange content of comparable indigenously manufactured plant. As the scheme had worked successfully and a number of small projects based on the use of secondary raw materials had come up, government had decided to continue the facility of allowing import of second hand paper machinery. However, having regard to the



मिलने का पता :
टी-5134, आर्य समाज रोड
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general increase in the prices of imported machinery over the last five years, the permissible limits within which import of such equipments could be permitted have recently been reviewed.

For the guidance of intending entrepreneurs, the maximum amount of foreign exchange permissible for the import of different capacity second hand paper plants have been indicated in the table below. It may however be kept in mind that these are broad ceilings which are liable to undergo changes from time to time and entrepreneurs are advised to seek the advice of the Director General of Technical Development before submitting their applications. The guidelines are: (1) Applicants should not be affiliated to any large industrial or commercial group. (2) The project should preferably be located in a backward area.

Sale of Foreign Exchange

Under the exchange control regulations in force, authorised dealers in foreign exchange and money-changers are permitted to purchase foreign currency notes even from persons normally resident in India, besides tourists on temporary visit to the country. This freedom has been allowed to facilitate exchange into Indian rupees of foreign currency notes received by such person from visiting tourists in genuine circumstances.

While no hindrance thus exists in the way of the public exchanging foreign currency (received in genine circumstances from overseas tourists) in this manner, it is an offence under the Foreign Exchange Regulation Act, if the foreign exchange so acquired is retained by any person or sold or lent to any person other than an authorised dealer or money-changer. This clarification has been made by the Reserve Bank, as there seems to be an impression amongst the public that exchange of foreign currency into Indian rupees through authorised dealers by persons normally resident in India is subject to restrictions.

Leather Chemicals

The government will consider applications from intending enterpreneurs for setting up units for production of leather chemicals. The minimum economic capacity of a unit would be 1,000 tonnes. The objective is to increase the indigenous availability of leather auxiliaries and finishing agents such as fat liquors, binders, lacquers, emulsions etc. Now, there is a considerable gap between the present installed capacity of 4,300 tonnes estimated and demand. When this gap is bridged, it will help achieve 100 per cent conversion of the available semi-finished leather into finished leather and leather goods. At present, only 50 per cent of the available semi-finished leather in the country is converted into finished leather.

Maximum Amount of Foreign Exchange Permissible for the Import of Different Capacity Second-hand Paper Plants

(Rs in lakhs)

Item	10 T.P.D.	15 T.P.D.	20 T.P.D.	25 T.P.D.	30 T.P.D.
Stock Preparation Equipment	—	—	0.6	0.6	0.6
MF Paper machine (Execluding Finishing Equipment)	3.6	3.6	8.4	16.8	26.4
Finishing Equipment for MF Machinery	6.0	6.0	6.0	7.2	7.2
MG Paper Machine (Excluding Finishing Equipment)	8.4	12.0	18.0	24.0	31.2
Finishing Equipment for MG Machinery	—	—	—	6.0	7.2

ICAR Committee on Research and Training

A six-member committee headed by Dr A. S. Kahlon, chairman, Agricultural Prices Commission, has been constituted by the director general, Indian Council of Agricultural Research, to review the research and training programmes in agricultural economics and statistics. The other members of the committee are: Dr Daroga Singh, director, Indian Agricultural Research Statistics, New Delhi; Mr V. N. Amble, additional director, Central Statistical Organisation, New Delhi, Dr G. Parthasarathy, Andhra Pradesh University, Waltair; Dr Balwant Reddy, Administrative Staff College of India, Hyderabad and Dr P. N. Saxena, assistant director general, ICAR, New Delhi, (member secretary).

The scientific panel of the Indian Council of Agricultural Research (ICAR) for agricultural economics, statistics and marketing has been reconstituted for a fresh three-year term ending February 28, 1982. Dr A. S. Kahlon, chairman, Agricultural Prices Commission, will be the chairman and Dr P. N. Saxena, assistant director general, ICAR, will be member-secretary of the panel. The members of the 23-member panel are: Dr R. K. Patel, Dr Kamta Prasad, Dr I. J. Singh, Dr S. L. Shah, Dr A. Vaidyanathan, Dr B. Natarajan, Dr D. K. Singh, Dr S. M. Pathak, Dr S. S. Acharya, Dr K. K. S. Chauhan, Mrs Devaki Jain, Dr D. Singh, Prof. P. K. Bose, Dr T. R. Puri, Dr N. Sunder Raj, Dr Ramjibhai M. Patel, Dr S. N. Mishra, Prof V. K. Gupta, Mr T. P. Gopalaswamy, Dr P. C. Goswamy

On the 33rd Independence Day

Two years of Development in Rajasthan (1977-1979)

1. Sixth Plan Outlay Totals Rs. 1750 crores. This is larger than the outlay of all the previous plans by Rs. 324 crores.
2. Per capita plan expenditure will be Rs. 107 which will be more than the national average for the first time.
3. Seven lakh and eleven thousand metric tonnes of grain distributed under the "Food for Work" scheme.
4. Out of 65,250 rural development works undertaken under the "Food for Work" scheme 54014 works have already been completed.
5. Two lakh twelve thousand and eight hundred fifty eight poor rural families benefitted under the Antyodaya Scheme.
6. Rs. 20 crores sanctioned for the benefit of Antyodaya families.
7. Three thousand nine hundred eighty six villages of the state electrified.
8. Forty eight thousand three hundred sixty five wells energised.
9. One hundred and thirty verterinary hospitals opened.
10. Subsidies worth Rs. 10.73 crores given to small and marginal farmers and landless labourers.
11. Eight thousand three hundred and forty six small scale industrial units registered.
12. Loans worth Rs. 23.50 crores given by Rajasthan Finance Corporation.
13. One thousand seven hundred seventy eight primary schools opened.
14. One thousand three hundred forty eight various schools raised to higher standards.
15. Nine hundred and five Ayurvedic Dispensaries opened.
16. Drinking water facilities made available in 906 villages.
17. Construction and repairs of 1623 kilometres of roads.
18. Eighteen lakhs and three thousand schemes relating to agricultural land disposed.

(Issued by Rajasthan Government)

and the economics and statistical Adviser, department of Agriculture. The panel will review periodically the research work in the respective disciplines, assess from different angles the scheme financed by ICAR and make recommendations for improving research activities relating to utilisation of agricultural produce and animal products.

Employment of Foreigners

Procedures governing engagement of foreign nationals in technical as well as non-technical fields by Indian firms and companies has been streamlined in order to cut down delays and to avoid unnecessary correspondence. A press note pointed out that as the government has to take a total view of employment of foreign nationals, including the foreign exchange expenditure resulting from such employment, it has been decided that the Indian firms and companies intending to engage the services of foreign technicians may hereafter apply directly to the administrative ministry of the central government even if the period does not exceed 12 man-months. After the government's approval is obtained by an applicant company, the foreign technicians to be employeed in India should submit to the Reserve Bank of India applications through the company for permission under Section 30 of the Foreign Exchange Regulation Act.

EEPC Awards

The Engineering Export Promotion Councils (EEPC) 1977-78 award for outstanding performance in export has been given to Bharat Heavy Electricals Ltd (BHEL). According to the council, BHEL made has significant contributions in the field of export performance not only in terms of entering new markets but also undertaking projects which are the first of its kind in India. The award was presented by the Commerce minister, Mr Hitendra Desai, at the annual general meeting of the council recently.

Other award winners are: India Electric Poles Manufacturing Company, Bombay (small-scale exporters). Tata Exports Limited, Bombay (export houses and merchant exporters); Western India Erectors Ltd, Poona, (civil engineering contractors) and Tata Consulting Engineerings, Bombay (engineering consultancy, technical know-how and other engineers).

Twelve exporters have been given regional shields for good performance. In addition, 76 firms have been given awards for increasing their exports in 1977-78 by 50 per cent or above over their exports of previous year or by 25 per cent, or above over their exports of previous year or by 25 per cent on an average over the performance of preceding three years as well as those who exported more than 50 per cent of their production.

Indo-Korean Tie-ups in West Asia

Mr Bum Suk Lee, South Korean ambassador in India, saw "tremendous chances" for Indo-Korean joint ventures in west Asia.

The subject had been "at the top of the list" of the Indo-Korean Business Council and quite a few corporations in his country were eager to join hands with India, the ambassador told newsmen recently. Already, the Association of Indian Engineering Industry

(AIEI) had discussions with the Federation of Korean Economists and Industrialists in Delhi some time ago, when it was decided to look for joint ventures in west Asia.

Hyundai Corporation the largest company in Korea with a 2-billion project in west Asia, had a few days ago, sent a representative to India for opening a branch office in Bombay. This corporation will seek Indian workers for its projects in the Gulf area, procure equipment and materials in India for use in its projects and explore the possibilities of setting up projects between the two countries.

Vizag Steel

Civil works on the Visakhapatnam steel plant will commence on November 1. Plans and work schedules are now being worked out by the Steel Authority of India (SAIL) and the state government. Senior executives of Dastur and Company, the consultants for the plant, are currently finalising the schedules. On the basis of workedout schedules, the centre will take a decision on the budgetary allocations for the works this year.

On the basis of the detailed project report the cabinet secretariat has communicated its investment decisions to SAIL. On its part, the state government is giving top priority to the provision of infrastructural facilities for the project. A high-level conference was held recently in the state secretariat to work out the details of man-power requirements of the project. SAIL has informed the state government that the total land requirement for the plant will be more than 17,000 acres of which 6,755 acres have already been handed over.

BHEL Equipment for Saudi Arabia

Bharat Heavy Electaicals Limited, (BHEL), Bhopal, has manufacured a control and relay panel equipment for export to Saudi Arabia against a turnkey contract valued at about Rs 70 crores. The equipment was being exported to Wadi Jizan electrification project in Saudi Arabia. BHEL had been entrused to supply and commission the complete diesel generating station, 33 kv sub-station and electrical distribution network. The station was being equipped with six diesel generating sets. Some 80 control and relay panels would be installed at Jizan.

World Carpet Fair

An International carpet fair would be held in Delhi in January-February next year to promote carpet exports, Mr L. C. Jain, chairman of the All-India Handicrafts Board told newsmen recently. He said that delegates from 20 countries would attend the fair. Mr. Jain added that the board had exported carpets worth Rs. 100 crores during 1978-79 and hoped to quadruple it in the next three years. The carpet industry had a tremendous market support both within the country and outside. Apartfrom Persian motifs, carpets designed in the country would also be displayed at the fair.

The board would set up over 600 carpet weaving centres this year in additon to the existing 600.

Names in the News

Mr R. K. Natesan has taken over the charge of general manager, Northern Railway. The last post held by him was as chief commercial superintendent of South Central Railway.

FROM PAPER TO PROJECT TO PLANT

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Branches at: Mysore, Mangalore, Raichur.

COMPANY AFFAIRS

Jiyajeerao Cotton

Jiyajeerao Cotton Mills has shown good results for the year ended March 31, 1979. The directors have recommended an unchanged equity dividend of 10 per cent. The turnover increased from Rs 67.23 crores to Rs 73.28 crores and the gross profit expanded from Rs 4.50 crores to Rs 7.59 crores. After providing Rs 1.73 crores (Rs 1.68 crores) for depreciation, Rs 29.75 lakhs (Rs 35.87 lakhs) for investment allowance and Rs 2.99 crores (Rs 1.29 crores) for tax liability, the net profit is Rs 2.59 crores (Rs 97.24 lakhs). Out of this, the proposed dividend will absorb Rs 69.55 lakhs.

Both the textiles and chemicals divisions performed well. The turnover of the former division was higher because of increased production of sophisticated varieties. The availability of cotton was easier and prices were generally within the normal range. But the cost of stores, colours, chemicals, power and fuel showed further increases. The chemicals division fared better with production of soda ash rising from 132,000 tonnes to 146,000 tonnes. The production of caustic soda, however, was lower at 23,188 tonnes against 24,563 tonnes previously.

The directors have pointed out that the scheme of soda ash capacity expansion is under implementation, but progress has been slow due to various factors beyond the control of the management. Part of the imported equipment has arrived at the site and is being installed. Erection of indigenous machinery is also in progress. Efforts are being made by the management to maintain production, but labour trouble, shortage of basic raw materials such as salt and hard coke and inadequate supplies of coal are proving serious constraints on production during the current year.

TISCO

Mr J. R. D. Tata, chairman of Tata Iron and Steel Company (TISCO), has urged that the public sector financial institutions should not acquire between them more than one-third of the equity capital of a company, whether by purchase in the market or by subscription to new issues or by conversion of loans into equity. Such a change in government policy, according to him, would remove the fear instilled in the corporate sector by the mandatory convertibility clause, and with it a serious deterrent to fresh investment in development or modernisation. At present, the convertibility clause is included in every term loan given by the financial institutions in excess of Rs 25 lakhs to private sector companies.

The government has agreed that the right of conversion into shares would not be exercised by the financial institutions in respect of the Rs 30 crores loan granted to TISCO for development of the West Bokaro colliery. The company plans to borrow about Rs 50 crores in the form of foreign loans and deferred credits for equipment to be imported for the modernisation programme. According to the present estimate, it would be short of about Rs 80 crores. The company has approached the government to meet this shortfall from the Steel Development Fund to which the TISCO contributes a considerable amount through its sales. The company is required to deposit about Rs 43 crores per year into this fund.

TISCO has decided to appoint a panel of four eminent persons unconnected with the company and enjoying public confidence to judge whether the company has really lived up to its social and moral obligations to consumers, employees, shareholders, society and the community. The panel may consist of a retired judge of the Supreme Court or of a high court, a member of parliament, a trade unionist and a sociologist. The panel's report will be made public.

Loss of Production

Mr Tata has pointed out in his annual statement to the shareholders that there has been considerable loss of production on account of shortages or irregularities in the supply of coal and power. During the first quarter of the current year, loss of production at the plants of the five main steel producers was about 140,000 tonnes, of which 30,000 tonnes pertained to TISCO. If this situation prevails during the rest of the year, the production loss will be more than 500,000 tonnes and ultimately involve an increase of Rs 150 crores in the country's import bill, stated Mr Tata.

GEC Profits Decline

The directors of General Electric Company of India have recommended a dividend of Rs 1.20 per equity share for the year ended March 31, 1979, with a pre-tax profit of Rs 321.32 lakh against Rs 382.32 lakh in the previous year. Of this amount Rs 181.96 lakh has been provided for taxation and Rs 6.35 lakh for investment allowance reserve. After transfer of Rs 1.73 lakh from development rebate reserve, Rs 134.74 lakh (Rs 151.49 lakh) is available for appropriation—Rs 86.40 lakh for dividend and Rs 48.34 lakh to general reserve.

Aluminium Industries

Aluminium Industries has shown a small improvement in its working results for the year ended March 31, 1979, with a net profit of Rs 26.86 lakh compared to a net loss of Rs 118.2 lakh shown in the previous year.

After providing Rs 3 lakh (Rs 0.30 lakh) for investment allowance reserve and after taking into account the loss of Rs 107.73 lakh brought forward from the previous year, a debit balance of Rs 83.87 lakh is carried forward.

Avery India

Avery India Limited will be entering the capital market on August 20, 1979 with the public issue of 646,666 equity shares of Rs 10 each at a premium of Rs 9 per share. The subscription list will close on August 30 or earlier at the discretion of the directors but not before August 22. The main object of the issue is to carry out the directive of the Reserve Bank of India accord-

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IS A REGULAR WATCHWORD WITH

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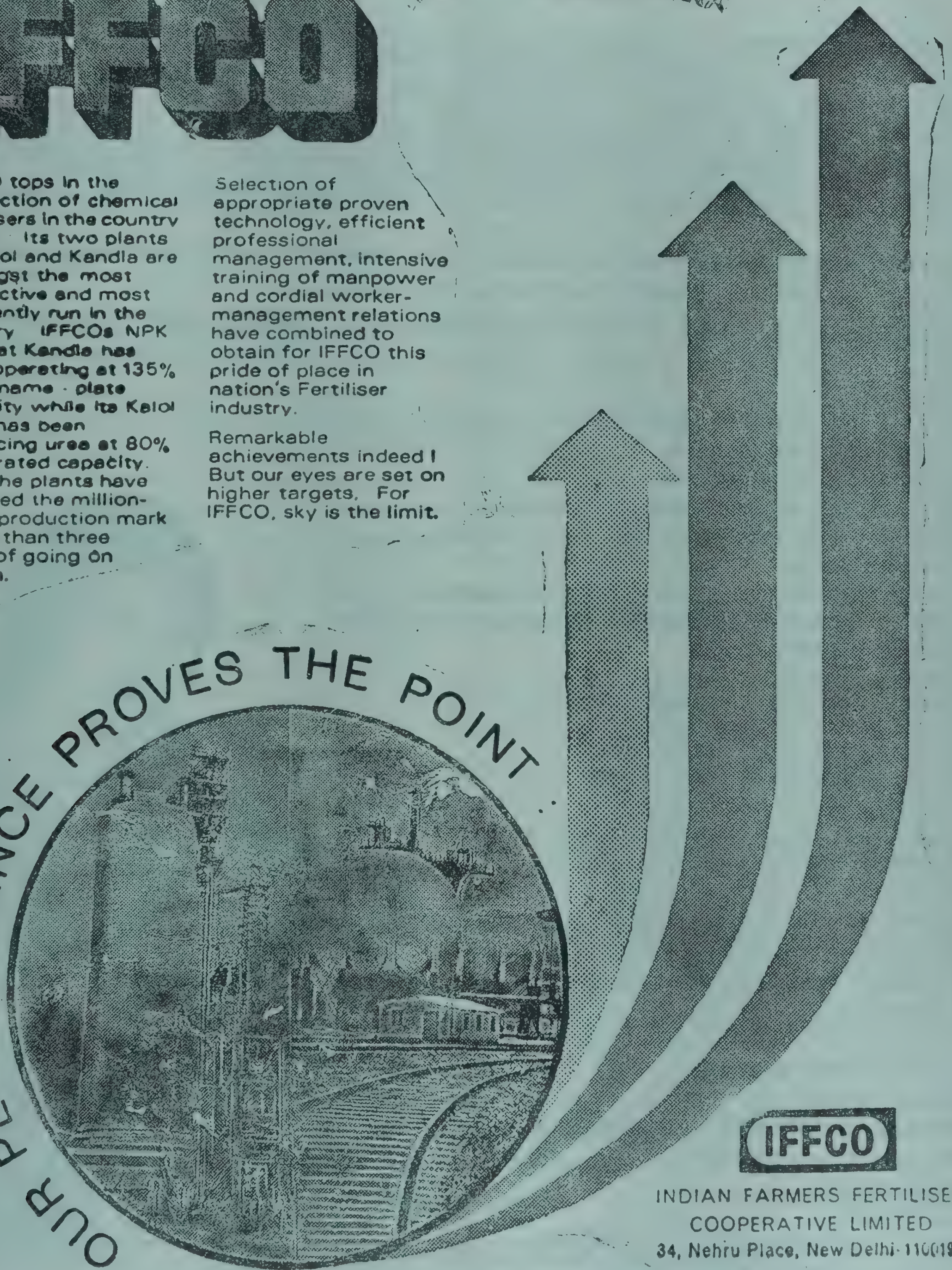
Selection of appropriate proven technology, efficient professional management, intensive training of manpower and cordial worker-management relations have combined to obtain for IFFCO this pride of place in nation's Fertiliser industry.

Remarkable achievements indeed! But our eyes are set on higher targets. For IFFCO, sky is the limit.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- HANDLOOMS
- FISHERIES
- DAIRY
- POULTRY
- SERICULTURE
- COIR
- MINOR FOREST PRODUCE

ACHIEVEMENTS AT A GLANCE

	1962-63	1976-77
Agricultural Produce marketed by Cooperatives (Rs in Crores)	160	1524
Fertilizers marketed by Cooperatives (Rs in Crores)	40	743
Consumer articles sold through Cooperatives (Rs. in Crores)	28	546
Agro-Processing Units promoted	639	2248
Storage capacity created (in lakh tonnes)	11	55
Sugar Produced by Cooperatives (in lakh tonnes)	4.7	28

TILL TODAY, NCDC HAS ALREADY INVESTED OVER Rs. 240 CRORES IN THE DEVELOPMENT OF COOPERATIVES

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Regional Offices : ● Bangalore ● Bhopal ● Calcutta ● Chandigarh ● Patna ● Poona ● Gauhati ● Jaipur ing to which the non-resident interest in the company shall not exceed 40 per cent. For this purpose, Avery Ltd. UK, has also offered for sale 155,000 equity shares of Rs 10 each in the company at a premium of Rs 9 per share out of their holding of 1,352,000 shares to the existing resident shareholders in the ratio of 1:6.

The name of the company shall be changed upon the equity holding of Averys Ltd being reduced below 39 per cent or on June 25, 1981 whichever shall occur first. The company manufactures a wide range of weighing and testing machines at its factories in Calcutta and Ballabhgarh. Besides, the company has 74 branches and service depots. The company proposes to manufacture automatic weighing machines and other types of sophisticated weighing machines for which steps will be taken in due course.

Bihar Finished Leathers

The Bihar Finished Leathers Ltd has decided to offer to the public 590,000 equity shares of Rs 10 each for cash at par. The company is setting up three units at Bettiah, Barauni and Muzaffarpur for production of finished leather from semi-processed hides and skins. The company promoted by the Bihar State Leather Industries Development Corporation Ltd has invested Rs 88 lakhs in the share capital. The subscription list, which opens on August 22, will close on September 4 or earlier but not before August 24.

The units at Bettiah and Barauni will process exclusively finished leather from cow hides with an annual individual capacity of 150,000 hides each. The Muzaffarpur unit will exclusively produce finished leather from skins with a capacity of 750,000 skins per year. The Central Leather Research Institute will provide the company with technical consultancy. The unit is stated to go on stream by the end of the current year (1979). The export of finished leather from India has zoomed from Rs 19.18 crores in 1972-73 to Rs 104.8 crores in 1977-78. Similarly, export of leather, footwear and leather goods has gone up from Rs 13.87 crores in 1972-73 to Rs 33.88 crores in 1977-78.

Star Textile Engineering

Star Textile Engineering is paying 12 per cent dividend for the year ended March 31, 1979. According to preliminary figures, the turnover has amounted to Rs 10.30 crores against Rs 5.60 crores for the preceding 15 months and the profit before tax is Rs 101.30 lakhs against a loss of Rs 36.40 lakhs. After providing Rs 10.30 lakhs for taxation, Rs. 8.02 lakhs for investment allowance and after certain adjustments, the net profit is Rs 80.02 lakhs compared to a net loss of Rs 39.63 lakhs for the previous year. Out of this, the proposed dividend will absorb Rs 13.54 lakhs.

The company has plans to undertake manufacture of nickel perforated screens required for the automatic rotary and screen printing machines at a plant being set up at Nasik in Maharashtra. The manufacture of combers, lap formers and related accessories is proposed to be undertaken by a separate unit, Star Machinery Manufacturing, promoted as a subsidiary of the company. The company has obtained a contract worth Rs 2.80 crores for setting up a textile training institute in Kenya on a semi-turnkey basis. According to Mr Suresh Mehta, managing director, the current year's turnover of the company is expected to be around Rs 15 crores.

Vinod Paper Mills

Vinod Paper Mills Ltd. is entering the capital market on August 16 with a public issue of Rs 58.80 lakhs comprising 588,000 equity shares of Rs 10 each. The company will manufacture quality paper such as bond, air mail and manifold from agricultural wastes such as wheat and rice straw. Construction and plant erection work is progressing at a fast speed. Machinery from Sweden has arrived at the site. The management expects commercial production to commence by the end of the year.

East India Hotels

East India Hotels has taken in hand the second phase of Bombay's 'Oberoi Towers' whereby additional 200 rooms will be added to this hotel. On completion of this phase, it will become India's largest hotel. This will be followed by the last phase under which another 300 rooms will be added. The company has plans for the promotion of its hotels in India and abroad. It has completed renovation of hotel 'Oberoi Grand' in Calcutta. Further improvements are being planned to make it still better. At Darjeeling complete renovation of hotel 'Oberoi Mount Everest' is being taken on. At Srinagar, the new wing at hotel 'Oberoi Palace' is almost complete and is expected to be ready for occupancy by September this year.

International Computers

International Computers Indian Manufacture Ltd (ICIM) is entering the capital market on August 22 with a public issue of 625,000 equity shares of Rs 10 each for cash at par. A sum of Rs 5 per share is payable on application and Rs 5 on allotment. The subscription list will close on September 3, or earlier at the discretion of the directors of the company, but not earlier than August 24. The issue is fully underwritten by leading financial institutions, insurance companies and sharebrokers.

The company has, with effect from October 1, 1978, taken over the business of International Computers (India) Private Ltd (ICL India) comprising the sale, rental, maintenance and software support of data processing equipment and computers, together with relative assets for a purchase consideration of Rs 533 lakhs, against the book value of Rs 605 lakhs. This includes written down value of the rental base of data processing equipment and computers—Rs 465 lakhs (original cost Rs 1304 lakhs); and has a rental value of approximately Rs 35 lakhs per month, as on October 1978.

Out of the consideration of Rs 533 lakhs payable to ICL India, 700,000 equity shares of Rs 10 each in the capital of the company fully paid up will be issued to ICL, UK, and the balance of the purchase consideration of Rs 463 lakhs will be treated as interest-free unsecured loan, to be repaid in three equal annual instalments. ICL, UK group is one of the largest and most successful non-American computer companies and has a record of high technical achievement and rapid growth. Its turnover increased more than five-fold, from £92 million in 1968 to £509 million in 1978. The group designs, produces and sells total range of computer systems and provides systems and engineering support to users in 83 countries around the world.

ICIM was established in India in 1963 and the company commenced manufacture of data processing equipment immediately thereafter. In 1968 it commenced manufacture of third generation 1901A computer systems. ICL UK's holding has now been reduced to 40 per cent which it would continue to hold after the present public issue. ICIM is now embarking on progressive manufacture of 2904 computer systems, including such constituent peripheral devices as magnetic tape controllers and drives, card readers and line printers, which will also be marked as OEM devices.

Chemicals and Plastics

The working of the Chemicals and Plastics India Ltd for the financial year ended March 31, 1979, has shown an allround improved performance. Despite greater burden of interest and depreciation, the company has earned a higher profit of Rs 215.14 lakhs as against Rs 154.85 lakhs in the previous year, out of which Rs 91.00 lakhs (Rs 96.00 lakhs) have been provided for taxation and Rs 26.80 lakhs (Rs 2.60 lakhs) as investment allowance reserve. The surplus in the profit and loss account before declaration of dividend and transfer to general reserve was Rs 122.29 lakhs. The directors have recommended maintenance of the equity dividend at 15 per cent. The company had declared this maiden dividend last year. The total dividend, including those on the 'A' preference (9½ per cent) and 'B' preference (9 per cent), amounts to Rs 32.28 lakhs. A sum of Rs 90.00 lakhs (Rs 3.00 lakhs) has been transferred to general reserve.

Increased Production

The production and turnover of the company also registered an increase over the previous year, though there was a disruption in production during the year due to industrial unrest. The production of PVC resins was up by 14 per cent, and that of PVC pipes and related products by a significant 75 per cent. The turnover moved up by 24 per cent to Rs 1679.34 lakhs (Rs 1354.12 lakhs) with good demand for the company's products, particularly for PVC pipes, consequent on the emphasis on rural water supply programmes by the various state governments. The company's industrial alcohol plant for captive use was commissioned in October 1978 and has been operating satisfactorily. Central government subsidy and an interest-free sales tax loan have been received for setting up this unit in a backward district.

The plant modernisation and debottlenecking programme presently under way is expected to be completed by the end of the current year, raising the effective capacity of the plant to 20,000 tonnes per annum of PVC. Further expansion to 30,000 tonnes per annum and a project for recovery of chlorine from hydrochloric acid effluent by oxyhydrochlorination process are under consideration for implementation during the next two years.

Shree Vallabh Glass

The directors of Shree Vallabh Glass have recommended a 20 per cent dividend on the capital as enlarged by a one-for-two bonus issue for the year ended March 31, 1979. The company has paid a total dividend of 30 per cent, including 12 per cent by way of bonus, on the old capital for the previous year. According to preliminary statement, the company has earned an increased gross profit of Rs 2.51 crores against Rs 1.47 crores in the previous year, although sales have been only marginally better at Rs 11.99 crores against Rs 11.43 crores.

After providing Rs 99.36 lakhs (nil) for repair expenses, Rs 45.89 lakhs (Rs 41.67 lakhs) for depreciation and Rs 20.50 lakhs (nil) for taxation, the net profit amounts to Rs 85.74 lakhs as against Rs 105.82 lakhs. Out of this, the proposed dividend will absorb Rs 34.43 lakhs (same) and Rs 51.30 lakhs (Rs 71.40 lakhs) is proposed to be transferred to the general reserve. The implementation of the licence for the manufacture of superior quality sheet glass at Bolser in Maharashtra is in progress. The project is expected to go on stream in early 1980.

The company along with some other entrepreneurs have executed an agreement with Gujarat Industrial Investment Corporation, Ahmedabad, for setting up a glass complex having approximate investment of Rs 54 crores. Floatglass, fibre glass, opthalmic glass etc.

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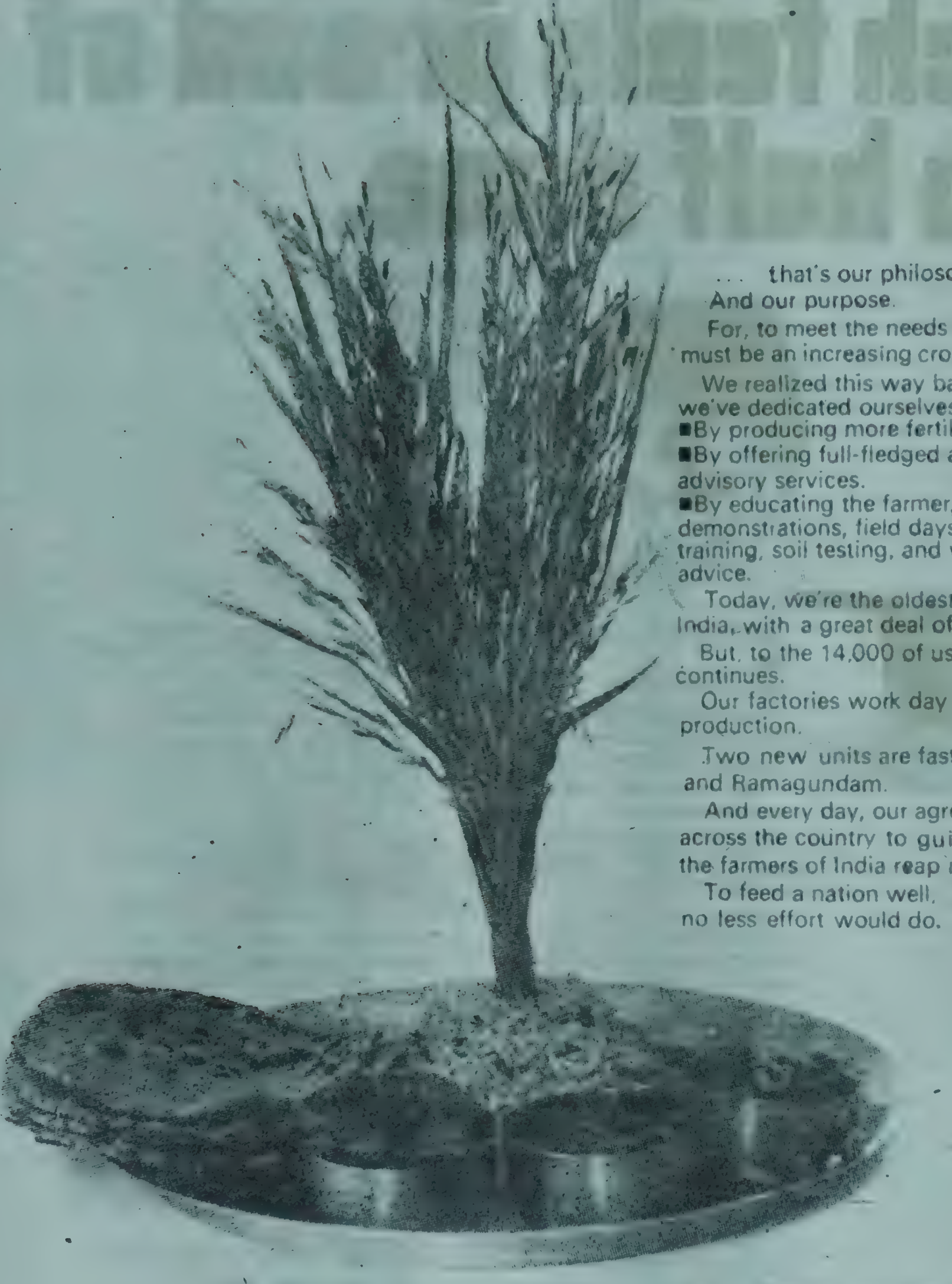

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are proposed to be manufacretud in this joint sector complex.

Tata-Yodogawa

Tata-Yodogawa Limited achieved a record production during the year ending March 31, 1979. The company's earnings at Rs 733.34 lakhs was 22 per cent over the previous year's figure of Rs 601.89 lakhs. After providing for depreciation Rs 57.94 lakhs (Rs 54.61 lakhs) and taxation Rs 51.00 lakhs (Nil), the net profit amounted to Rs 64.61 lakhs (Rs 62.99 lakhs). After setting aside development rebate reserve Rs 13.00 lakhs (Rs 65.00 lakhs), investment allowance reserve Rs 6.18 lakhs (Rs 0.42 lakh), general reserve Rs 1.62 lakhs (Nil), the disposable profit amounted to Rs 43.82 lakhs (Rs 15.00 lakhs). The board of directors have decided to recommend a dividend of 12 per cent subject to tax. This would absorb Rs 29.99 lakhs (Rs 14.99 lakhs) leaving a balance of Rs 13.83 lakhs (Rs 0.014 lakhs) to be carried forward.

India Cements

India Cements Limited was highly successful in increasing production of cement at both its units during the year ended March 31, 1979 inspite of the reemergence of infrastrucrtal bottlenecks relating to supplies of coal and railway wagons for the despatch of cement. The increase in production would have been even more gratifying but for the difficulties experienced by the Sankarnagar unit in stepping up clinker output due to coal shortage. The plant turned out 756,000 tonnes of clinker in 1978-79 against 756,000 tonnes in 1977-78. But cement output was much higher at 880,000 tonnes as compared to 741,000 tonnes, thanks to better utilization of pozzolanic material and carry over stocks of clinker.

Sales of the company were higher at Rs 37.31 crores against Rs 32.06 crores as there was a good demand for cement. The gross profit before depreciation and interest charges increased to Rs 366.27 lakhs from Rs 315.89 lakhs in the previous year. Interest charges were lower at Rs 65.41 lakhs against Rs 83.14 lakhs, while the claim towards depreciation is Rs 119.33 lakhs (Rs 112.69 lakhs). The provision for taxation is much higher at Rs 121 lakhs (Rs 89 lakhs) especially the claim for depreciation for income-tax purposes is only Rs 84 lakhs against the actual provision of Rs 119.33 lakhs. After taking credit for Rs 34 lakhs (Rs 30 lakhs) from development rebate reserve, the transfer to investment allowance Reserve is Rs 12 lakhs (Rs 3.70 lakhs) and debenture redemption rereserve Rs 20 lakhs (Rs 15 lakhs). The disposable profit is Rs 67.44 lakhs against Rs 54.15 lakhs, including the credit balance brought in from the previous year. After allocations to reserves, the dividend on equity capital has been raised to 11 per cent taxable from nine percent in 1977-78.

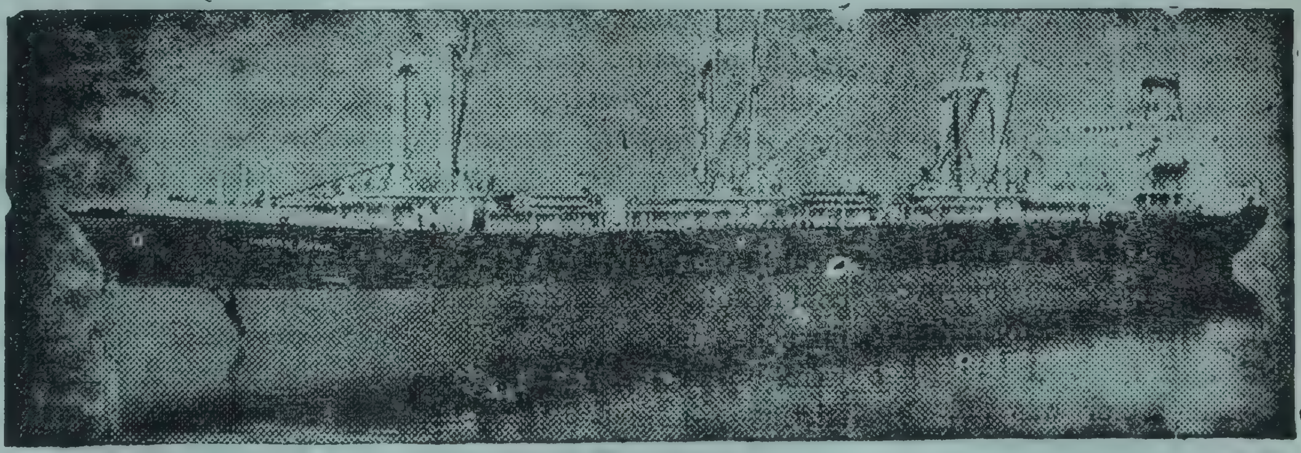
Inter-Continental Leather

Inter-Continental Leather Ltd (ICL), Madras, is entering the capital market on August 20 with a public issue of 196,000 equity shares of Rs 10 each to raise a part of the finance needed to implement the project for manufacturing finished leather. The Rs 120-lakh project is located at the SIPCOT industrial complex in a backward area of Ranipet. ICL is a joint venture promoted by Tamil Nadu Industrial Development Corporation Limited (TIDCO) with the Rumanian firm, Leather Central, acting as technical and financial collaborator.

The project is 100 per cent export oriented and the Leather Central would purchase 50 per cent of the total production. Apart from a cash subsidy of Rs 12.22 lakhs, the company has been sanctioned term loans of Rs 66 lakhs by SIPCOT, TIIC and the Indian Overseas Bank. The company conducted trial runs in May and regular commercial production in June this year.

ICICI

The issue of ICICI's 6-3/4 per cent instruments by way of bonds (1999) — in the nature of promissory notes—for Rs 41 crores with a right to retain excess subscription money up to 10 per cent of the issue, which opened for public subscription on August 6, 1979 was oversubscribed and hence closed at the close of banking hours on August 8, 1979.



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ICICI's study on corporate sector

The financial performance of the corporate sector in 1977-78 shows that the demand recession witnessed in the previous years was yielding place to business revival as could be discerned in a number of indicators. Stocks of finished goods declined from the level of the previous year whereas inventories of raw materials showed an increase. The 417 companies increased their sales (net of excise) by 8.8 per cent from Rs 7777 crores in 1976-77 to Rs 8464 crores in 1977-78.

Gross fixed asset formation at 10 per cent in 1977-78 showed a modest revival. In 1977-78, exports of 207 companies went up by 6.7 per cent, or from Rs 464 crores to Rs 495 crores.

These are some of the findings which have emerged from a study of the finances of 417 public limited companies assisted by ICICI. Main findings of the study are given below.

THE FINANCIAL performance of the corporate sector in 1977-78 indicates that the demand recession witnessed in the previous years had petered out. Signs of recovery and pick-up in demand could be discerned in a number of indicators. Inventories of finished goods, which had piled up earlier partly on account of inadequate demand, tended to move down. There was also a decline in credit sales as reflected in the receivables position in 1977-78, indicative of the picking-up of demand, the levels of raw material inventories increased. Besides, there was a moderate improvement in capital formation. Profits after tax rose and the corporate sector was able to augment its retained profits besides enabling a number of companies to pay higher dividends.

However, apart from rising cost pressures (mainly due to rising wage bills) in 1977-78, the process of recovery was delayed in some industries. Among the major industries, there was a perceptible improvement in textiles and chemicals as also in a number of others such as electrical equipment, food products, glass and paper. But the gains achieved by these industries were negated to some extent by the performance of industries such as metal products (ferrous and nonferrous) and sugar; other industries which were still to partake fully in recovery, in the sense of sales improvement, were automobiles, machinery manufacture and rubber products. The net result was that the forward movement could not gather sufficient momentum and the improvement in corporate performance could not be seen in all the financial indicators. There were, however, signs that the stirrings of revival seen in 1977-78 would be further consolidated and the corporate sector as a whole could be expected to do much better in 1978-79.

Sales, Income and Costs: The annual rate of growth in sales (net of excise) of the 417 companies had decelerated between 1973-74 and 1976-77. This trend continued in 1977-78 as well. The sales of the sample companies increased from Rs 7776.7 crores in 1976-77 to Rs 8463.7 crores i.e., by 8.8 per cent in 1977-78, compared with the growth rates of 27.7 per cent (1974-75), 16.3 per cent (1975-76) and 10.3 per cent (1976-77) during the preceding three years. There was an increase of 9.0 per cent in the sales of the 308 profit-making companies in 1977-78 after growing by 27 per cent, 11.5 per cent and 12 per cent respectively in the previous three years.

The sales of the 109 non-profit-making companies increased by 7.4 per cent in 1977-78 after falling by 0.4 per cent in 1976-77, the growth rate in 1975-76 being 14.9 per cent. Compared to a rise of 8.1 per cent in 1976-77, the value of production increased by 9.0 per cent in 1977-78 (from Rs 7785.1 crores to Rs 8485.5 crores) in respect of the 417 companies. 'Other income' also increased by 12.5 per cent in 1977-78. Consequently, the declining trend in the rate of increase in the total income of the sample companies, was reversed with the total income rising by 9.1 per cent in 1977-78 as against 8.3 per cent in the previous year.

Like the total income, there was decleration in the annual growth rate of expenses between 1973-74 and 1976-77. However, in 1977-78 expenses rose by 9.5 per cent compared with 8.9 per cent in 1976-77. The largest increase of 11.1 per cent was recorded by salaries and wages, followed by a 10.9 per cent rise in the cost of raw materials consumed.

Profits Decline

Total value added of the sample companies at Rs 2251.4 crores in 1977-78 increased by Rs 179.7 crores or 8.7 per cent. While the share of salaries and wages in value added increased (from 48.8 per cent to 49.8 per cent) that of profits before tax declined from 24.7 per cent to 23.9 per cent in 1977-78. The share of interest and depreciation in value added remained more or less constant at 13.7 per cent and 12.4 per cent respectively.

Profitability: Gross profits, profits after tax and retained profits all staged a recovery in 1977-78. Gross profits (representing the profits before tax plus interest and depreciation) of the 417 companies rose by 6.4 per cent reaching a level of Rs 1127.4 crores compared to the increase of 4.5 per cent in the previous year and 0.8 per cent in 1975-76. Profits after tax. which had declined in 1975-76 (by 20.2 per cent) and 1976-77 (by 1.8 per cent) rose by 15

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per cent in 1977-78. A similar trend was observed in the case of retained profits which increased by 23.4 per cent in 1977-78 (as against a decline of 13.5 per cent in 1976-77). The improvement in the volume of profits was attributable to enhanced turnover on the one hand and stabilisation of profit margins. Gross profits as percentage of sales remained more or less steady at 13.3 per cent in 1977-78, (13.6 per cent in the previous year) after declining in 1975-76 (from 16.6 per cent to 14.4 per cent) and 1976-77 (from 14.4 per cent to 13.6 per cent). The falling trend in the operating profit ratio also was moderated, operating profits as percentage of sales being 6.4 per cent in 1977-78 as compared to 6.6 per cent, 7.1 per cent and 9.5 per cent respectively in each of the three previous years.

Return on Capital

The return on capital employed (profits before tax plus interest as a percentage of net worth plus interest bearing debt), which had declined during 1975-76 and 1976-77, was also maintained at 16.3 per cent for the 417 companies in 1977-78. The number of companies with no positive return declined in 1977-78 after rising from 26 in 1974-75 to 49 in 1976-77. There was an increase in the number of companies having a return on capital employed of above 15 per cent. These trends are depicted Table I.

While gross profits in 1977-78 of the sample companies rose by Rs 67.4 crores, an extra provision of Rs 40.5 crores had to be made for interest and depreciation thus leading to an increase of Rs 26.9 crores in operating profits. Operating profits for the sample as a whole increased from Rs 512.2 crores in 1976-77 to Rs 539.1 crores in 1977-78 indicating a rise of 5.3 per cent during the year as compared to a fall of 12.5 per cent during 1975-76 and an increase of 1.7 per cent duriug 1976-77. The industry groups which helped to push up operating profits were mainly chemicals (increase of Rs 24 crores), man-made fibres and textiles. The 308 profit-making companies witnessed an increase of 21.7 per cent in their operating profits during 1977-78, as against a rise of 10.3 per cent in the previous year. The increase was the highest (14.2 per cent) in the case of companies with gross fixed assets between Rs 5 crores and Rs 10 crores. The losses of 49 companies in the smallest size group (gross fixed assets less than one crore rupees) were reduced by 33.6 per cent.

Despite an improvement in sales income in 1977-78 (7.4 per cent rise as against 0.4 per cent decline in 1976-77), for the group of 109 non-profit-making companies there was further deterioration in their financial position. Gross profits as percentage of sales decilned to 5.2 per cent from 14.0 per cent in 1974-75. Operating losses as a percentage of sales increased from 2.3 per cent in 1976-77 to 4.4 per cent in 1977-78—a considerable deterioration from the operating profits to sales ratio of 5.4 per cent in 1974-75. From a positive amouut of Rs 97.1 crores in 1974-75, with a steady erosion, reserves and surplus in the case of 109 non-profit-making companies turned into a negative sum of Rs 9.4 crores.

The number of non-profit-making companies (negative profits before tax) rose from 76 in 1976-77 to 109 in 1977-78. If no provision is made for depreciation and interest, 24 of the 109 would still be non-profit-making, the number of such companies rising to 68 (57 in the previous year) if interest is taken into account. In 1977-78 the industry group accounting for the largest number of non-profit-making companies was cotton textiles (19), out of which 11 companies were in the size group of gross fixed assets between Rs 1 crore and Rs 5 crores. Ferrous metal products, the industry with 17 non-profit-making companies, came next. Smaller sized companies (those with gross fixed assets less than Rs 5 crores each) were more numerous among the non-profit-maktng companies; their number was 75. In the largest size group (containing companies with gross fixed assets above Rs 10 crores each) there were 15 non-profit-making companies.

Allocation of Profits : Provision for taxation by the 417 companies at Rs 267.8 crores (49.7 per cent of profits before tax) declined by 3.0 per cent in 1977-78. Dividend for the sample companies claimed a slightly higher share of operating profits (26.2 per cent in 1977-78 compared to 25.5 per cent in 1976-77) and remained steady at 11.2 per cent of total paid-up capital after rising from 8/9 per cent in 1974-75 to 11.2 per cent in 1976-77. In the case of profit making companies, the percentage continued to improve for the fourth year in succession. The improvement in profits enabled a number of companies to step up dividend in 1977-78. The number of companies paying dividend of more than 12 per cent continued to increase from 66 in 1974-75 to 133 in 1975-76, 148 in 1976-77 and 154 in 1977-78. Also, the number of companies showing no dividend declined marginally in 1977-78. These trends are indicated in Table II.

There was a large increase in the share of retained profits in the operating profits for the

TABLE I

Frequency Distribution of Companies According to Return on Capital Employed

Range	Number of companies				
	1973-74	1974-75	1975-76	1976-77	1977-78
No positive return	35	26	41	49	47
0.1 per cent to 10.0 per cent	83	66	89	99	94
10.1 per cent to 20.0 per cent	173	161	154	140	154
20.1 per cent to 30.0 per cent	79	98	84	77	74
30.1 per cent and above	47	66	49	52	48
All Ranges	417	417	417	417	417

sample as a whole in 1977-78 (24.4 per cent in 1977-78 as against 20.6 per cent in 1976-77). Despite a sizeable negative retention of profits in the case of non-profit-making companies in 1977-78 (Rs 52.5 crores) for the sample as a whole, retained profits increased by 23.5 per cent after decreasing for two successive years. In the case of profit-making companies retained profits went up by 29.9 per cent and accounted for 31.2 per cent of profits before tax in 1977-78 as compared with around 26 per cent in the preceding two years,

Sources of Funds

In 1977-78, 39.4 per cent of the increase in total assets of the sample companies was financed by internal sources comprising depreciation and reserves and surplus, as compared to 37.2 per cent in 1976-77. Depreciation accounted for 30.6 per cent of the total sources. The share of reserves and surplus in the total sources of funds moved up from 2.9 per cent in 1976-77 to 8.8 per cent in 1977-78. In the case of the largest size group (companies with gross fixed assets over Rs 10 crores each) the contribution of internal resources was 42.2 per cent. The Table III depicting sources and uses of funds in respect of 417 companies brings out the pattern of financing asset formation during the period under review.

Capital Formation: Trends in capital formation suggest an abatement of recessionary pressures in the corporate sector in 1977-78. There was a rise in gross fixed asset formation and inventory accumulation mostly of raw materials; work-in-progress component of inventories continued to increase at a faster rate.

Total assets comprising gross fixed assets, inventories and other current assets of the sample companies increased by Rs 821 crores in 1977-78. A major part of the increase (60.8 per cent) was accounted for by growth in the gross fixed assets. The rate of increase in gross capital formation (indicated in the Table IV) which had declined from 17.4 per cent in 1974-75 to 5.9 per cent in 1976-77, improved modestly to 8.4 per cent in 1977-78. One of the reasons for this was the increase in inventories from Rs 2,152.7 crores in 1976-77 to Rs 2,254.1 crores in 1977-78, following a slight fall in the previous year. Despite the rise in 1977-78, as percentage of sales, inventories constituted 26.6 per cent—the lowest proportion during the quinquennium under review. Besides, over three-fourths of the increase in inventories was in the form of stocks of raw materials and stores; stocks of finished goods and goods-in-transit were run down by 3.2 per cent.

A 10 per cent rise in gross fixed asset formation during 1977-78 showed a modest revival. There was an addition of Rs 499.5 crores (Rs 415.3 crores) of gross fixed assets by the sample companies in 1977-78 to take their total gross fixed assets to Rs 5,485.6 crores. The plant and machinery component, which accounted for 72 per cent of gross fixed asset formation went up by 9.0 per

TABLE III

Sources and Uses of Funds
(1974-75 to 1977-78)

(Rs crores)

	SOURCES			
	1974-75	1975-76	1976-77	1977-78
Net Worth	314	173	126	161
Depreciation	214	244	243	251
Debentures	—	8	1	11
Deferred Credit	—	2	—4	—6
Long-term Borrowings	18	16	50	73
	546	443	416	490
Bank Borrowings for Working Capital	242	202	109	5
Unsecured Loans and Deposits	55	46	47	85
Creditors and Other Current Liabilities	405	178	108	241
Total	1,248	869	680	821
	USES			
	1974-75	1975-76	1976-77	1977-78
Gross Fixed Assets	422	424	415	500
Inventories	496	137	—20	101
Receivables and Advances	314	265	257	163
Investments	4	9	10	14
Cash and Bank Balances	12	34	18	43
Total	1,248	869	680	821

TABLE II

Frequency Distribution of Companies According to Ordinary Dividend as Per Cent of Ordinary Paid-Up Capital

Range	Number of companies				
	1973-74	1974-75	1975-76	1976-77	1977-78
No dividend	152	147	155	157	153
0.1 per cent to 12.0 per cent	151	204	129	112	108
12.1 per cent to 20.0 per cent	99	56	114	122	130
20.1 per cent to 30.0 per cent	13	5	16	19	19
30.1 per cent and above	2	5	3	7	5
All Ranges	417	417	417	417	417

cent, there being Rs 332.3 crores worth of addition to plant and machinery.

As a sequel to deceleration in the rate of growth in inventories the rate of growth of current assets declined from 29.8 per cent in 1974-75 to 6.3 per cent in 1976-77. In 1977-78, current assets increased by Rs 307.6 crores or by 7.2 per cent. Receivables and advances accounted for a rise of Rs 163.1 crores. While the ratio of finished goods inventories to sales declined from 30.1 per cent in 1976-77 to 27.9 per cent in 1977-78, receivables. which reflect the credit extended, remained constant at equivalent to 57 days of sales in 1977-78.

Changing Composition

Over the period, the share of inventories in the total current assets has declined from 55.8 per cent in 1973-74 to 49.2 per cent in 1977-78. As a proportion of sales, inven tories increased from 32.4 per cent in 1973-74 to 33.6 per cent in 1974-75 and then fell continuously to 26.6 per cent in 1977-78. Bank borrowings financed 53.8 per cent of inventories in 1977-78 as compared to 56.1 per cent in the previous year. The changing composition of inventories from 1973-74 to 1977-78 is shown in Table V.

For the last three years, the current ratio has remained steady at 54:46. On the other hand, the equity debt ratio, which had risen from 70:30 in 1973-74 to 74:26 in 1975-76, fell marginally to 73:27 in 1977-78.

Performance of Industry Groups: During 1977-78, all the industry groups (except sugar), witnessed an increase in sales, and for industry groups such as food products, textiles, glass and pottery, chemicals and paper, the rate of increase was higher than the sample average of 8.8 per cent. The highest rate of growth in sales was in the case of food products (other than sugar). The two industry groups textiles and chemicals, which have a big weight in the sample, contributed an extra Rs 133.5 crores (19 per cent growth) and Rs 115.4 crores (9.2 per cent rise) to sales in 1977-78.

Industries such as cement, man-made fibres and cotton textiles registered an increase in their gross and operating profit ratios. However the jute and woollen textile industries showed a relatively large decline. The cement industry improved its profitability. In line with trends in the world shipping indnstry, the profitability of the shipping industry continued to decline due to an escalation of cost and a drop in freight earnings.

Mixed Results

Again, industries such as cement, chemicals, plastics, pharmaceuticals, man-made fibres, electrical equipment, food products (other than sugar), glass and pottery and textiles showed an improvement in return on capital employed over that in the previous year. In the case of cables, electric lamps, ferrous and non-ferrous metals, rubber and rubber products (including tyres), shipping, sugar, jute and woollen textiles, the return on capital employed declined.

Gross fixed assets for the sample as a whole grew by 10.0 per cent in 1977-78. As compared to this, industries such as woollen textiles (31.5 per cent), cigarettes (29.6 per cent), shipping (25.1 per cent) and food products (other than sugar (14.2 per cent) registerd increase higher than the average increase. In contrast to the above, for industries such as automobiles, cement, plastics, pharmaceuticals, textile machinery, aluminium, rubber products (including tyres and tubes) and cotton textiles, the rate of gross fixed capital formation was lower than the sample average. Industry groups with substantial gross capital formation in 1977-78 were: chemicals (Rs 90.4 crores), shipping (Rs 67.1 crores), ferrous metal products (Rs 44.8 crores) and paper (Rs 40.0 corres).

In the case of industry and product groups such as man-made fibres, cables, steel wire ropes, aluminium, shipping, rubber products and tyres and tubes the ratio of total dividend to total paid-up capital declined in 1977-78. Electric lamps, steel tubes and pipes, sugar and jute exhibited a declining trend in the dividenc ratio over the last five years, while pharmaceuticales, plastics, power generation and distribution, cigarettes and automobiles and cycles (including auto ancillaries) showed an increasing trend in the ratio o total dividend to total paid-up capital.

The liquidity position, as indicated by the current ratio remained constant for the sample as a whole in 1977-78; i improved for cement, fertilisers steel wire ropes and alnminium It declined for electric lamps, steel forgings and shipping.

State-wise Performance o Companies: In 1977-78, companies in most of the states (except Assam, Haryana Kerala and Rajasthan) and union territories experienced an increase in sales. However sales of companies situated in

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the states of Karnataka (19.0 per cent), Gujarat (14.2 per cent), union territories (12.5 per cent), Orissa (11.0 per cent) and Maharashtra (10.9 per cent) expanded at a rate higher than the sample average of 8.8 per cent.

Gross fixed asset formation during 1977-78 went up by more than Rs 50 crores each, in the case of companies situated in the states of Bihar, Gujarat, Maharashtra and West Bengal. However, in percentage terms gross fixed asset formation of companies situated in Haryana, Karnataka, Madhya Pradesh, Maharashtra, West Bengal and union territories was above the sample average of 10 per cent.

Gross Fixed Assets

Over the period 1973-74 to 1977-78, companies located in the states of Maharashtra, Karnataka, Gujarat, Tamil Nadu and West Bengal, expanded their gross fixed assets by about 10 per cent per annum. On the other hand, decelaration in the rate of gross fixed asset formation continued in the states of Assam, Bihar and Punjab for the third year in 1977-78. But there was a step up in the rate of gross fixed asset formation in the states of West Bengal, Uttar Pradesh and Madhya Pradesh and to a lesser extent, in Haryana, Karnataka and Kerala.

Data on exports was collected from the annual reports of individual companies. Out of the total sample of 417 public limited companies details are presented in respect of 207 exporting companies

Exports: In 1977-78 exports in the economy as a whole increased by 4.5 per cent, compared to a rise at the rate of over 20 per cent in each of the previous five years. Exports of manufactured products, except engineering goods and chemicals and allied products, declined. In line with the national trend, exports of the 207 companies in the sample went up by 6.8 per cent, rising from Rs 464 crores in 1976-77 to Rs 495 crores in 1977-78. As their total sales grew at a faster rate—9.4 per cent—the ratio of exports to sales declined marginally to 8.2 per cent. However, in the case of automobiles and automobile ancillaries, cement, electrical equipment, glass and pottery, machinery manufacture, pulp, paper and paper products, rubber products and miscellaneous industry groups exports to sales ratio improved in 1977-78.

Exports contributed 10 per cent of sales in the case of automobiles and metal products. Although the exports of chemicals and petrochemicals, metal products and textiles declined in 1977-78, their share in the total exports was significant. Of the total exports in 1977-78, 13 per cent was accounted for by textiles, 12 per cent by metal products (ferrous), 11 per cent by chemicals and petrochemicals and another 12 per cent by automobile and automobile products.

Inclusive of other foreign exchange earnings such as royalty and commission, the total foreign exchange earnings of the companies in the sample increased from Rs 471.8 crores to Rs 505.3 crores or by 7.1 per cent in 1977-78. However, reflecting the liberalisation in import policy over the last few years, foreign exchange expenditure increased by 61.8 per cent, from Rs 217.8 crores to Rs 352.5 crores in 1977-78. Consequently, the net foreign exchange earnings fell by Rs 101.1 crores from the previous year's level of Rs 254.0 crores.

The consumption of impor ed raw materials and spares Rs 446.1 crores (on cif basi in 1977-78 was 15.4 per ce of the total raw materials ar spares consumed of Rs 2,901 crores. The consumption imported raw materials ar spares increased by 29.3 p cent and that of indigeno raw materials and spares b 10.9 per cent. During th year, industry groups such automobiles and automobi products, glass and potte and metal products (ferrou consumed less of imported ra materials and spares.

TABLE IV

Capital Formation in the Corporate Sector

	Gross Capital Formation		Gross Fixed Ass Formation	
	Amount Rs. crores	Rate %	Amount Rs. crores	Ra %
1970-71	342.7	8.6	236.0	7.6
1971-72	576.2	13.4	141.1	4.2
1972-73	425.7	9.0	337.8	10.0
1973-74	949.5	18.0	379.4	10.0
1974-75	917.5	17.4	421.6	11 3
1975-76	561.6	9.1	423.9	10.2
1976-77	395.7	5.9	415.3	9.1
1977-78	600.9	8.4	499.5	10.0

Notes:–(1) Gross capital formation consists of fixed assets plu inventories. (2) From 1974-75 onwards the sample consists 417 companies, the sample for the previous years consists a larger number of companies.

TABLE V

Composition of Inventories

	1973-74		1974-75		1975-76		1976-77		1977-78	
	Rs crores	%	Rs crores	%	Rs crores	%	Rs crores	%	Rs crores	%
Raw materials and components	606	39.4	764	37.5	734	33.8	699	32.5	743	33.
Finished goods and goods in transit	411	26.7	527	25.9	664	30.6	648	30.1	628	27.
Work-in-progress	207	13.5	356	17.5	353	16.3	384	17.8	429	19.
Stores	315	20.4	388	19.1	421	19.3	421	19.6	454	20.
Total	1539	100.0	2035	100.0	2172	100.0	2152	100.0	2254	100.

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Through the eyes of a child

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No glue to make albums
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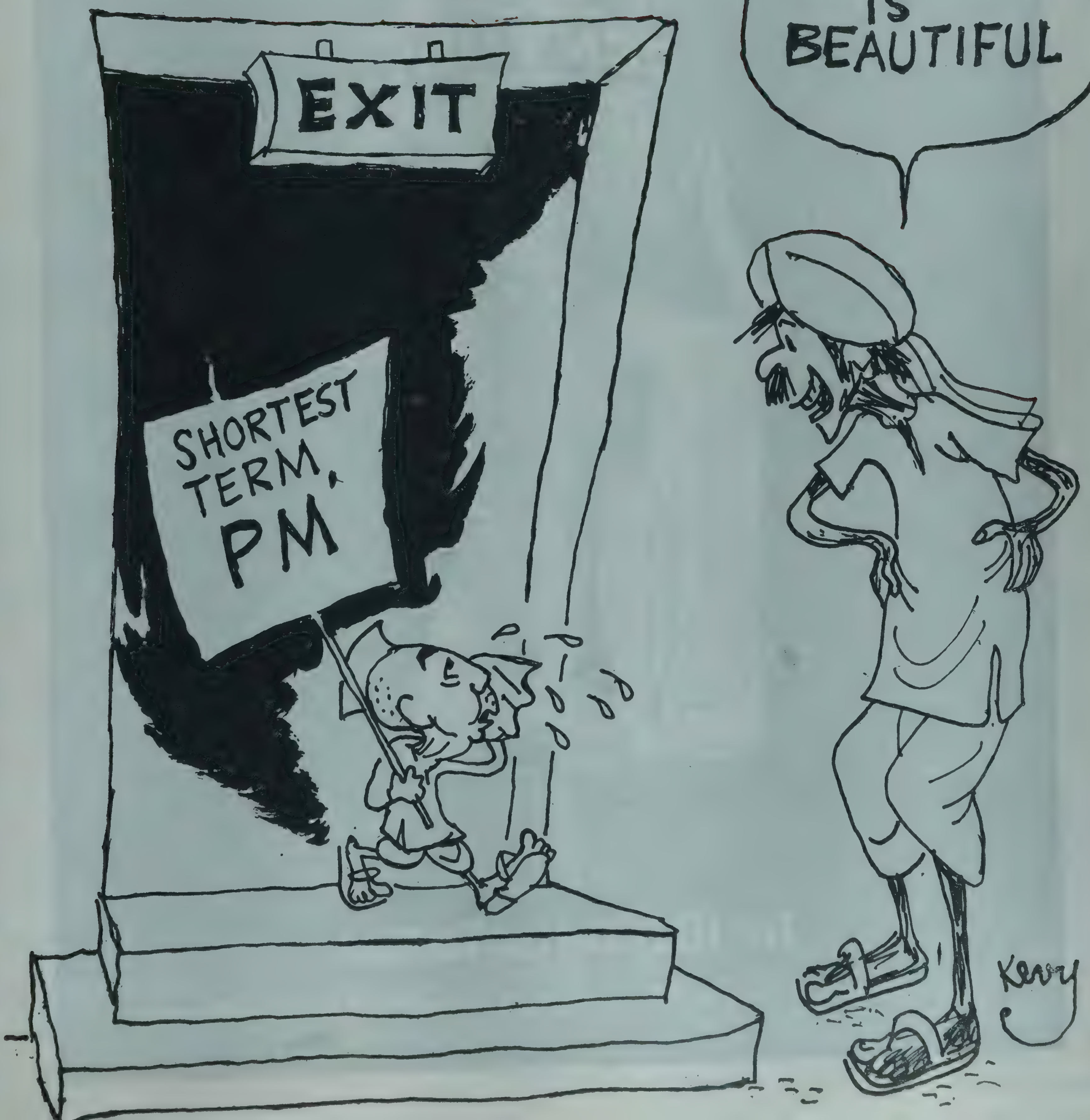
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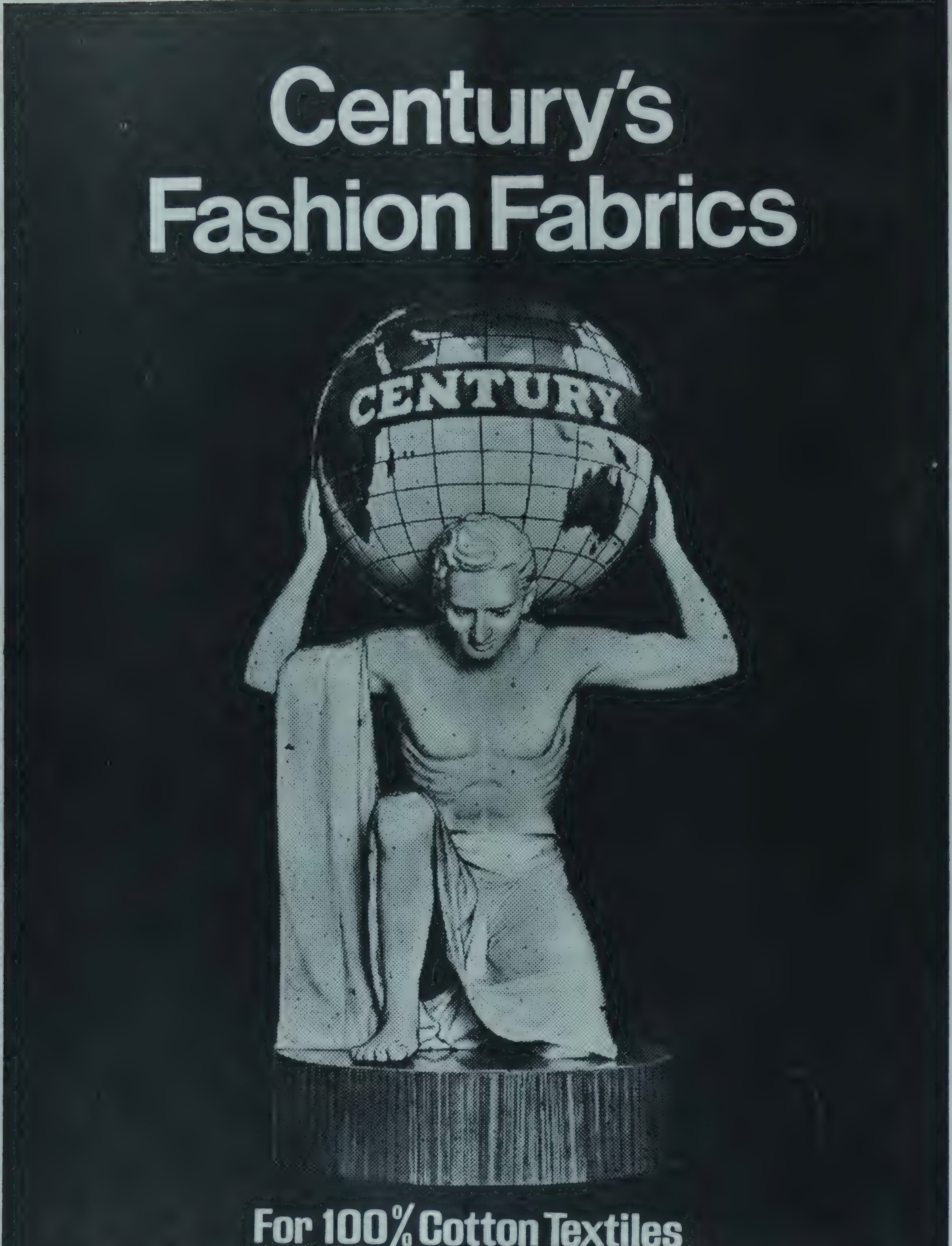

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Sweet revenge

SOONER THAN she herself might have expected—and more easily as well—Mrs Indira Gandhi has succeeded in wreaking vengeance on the electorate which had rejected her so decisively and derisively two and a half years ago. She has been the star character in the drama or the melodrama which has culminated in the dissolution of Lok Sabha by the president and she may also be the principal beneficiary of this unexpected denouement to the political skulduggery initiated by the Charan Singh faction in the pre-split Janata party. At the very least, the entry of her party in the forthcoming election campaign on a parity of political status with other parties and in unabashed rivalry to them should serve to confirm the respectability which she has so skilfully acquired for it through her participation in the game of power politics which the nation has been treated to during the last five or six weeks, while a more favourable construction placed on her prospects and her party at the hustings would suggest that the mid-term poll may secure for her at least a partial reversal of the condemnatory verdict passed on her and her emergency regime at the general elections held for Lok Sabha and a number of state assemblies in 1977. Whether the president intended this result or not, his decision to dissolve Lok Sabha, thereby necessitating a mid-term poll, has certainly struck a powerful blow in the cause of rehabilitating Mrs Gandhi as an aggressive factor in the political affairs of the country.

Several other consequences of the course adopted by the president to resolve the political crisis could also be unfortunate and undesirable. The Charan-Chavan council of ministers, which has never had any legitimacy and has on the other hand been an object of scorn and ridicule cutting across party lines, has been gifted the role of a caretaker government in defiance of all considerations of constitutional propriety or political decency. Indeed this apology for a government is itself so conscious of being a bastard that one of its first acts has been to assure the president of the country that it would generally refrain from taking any major policy decisions, save where the country's defence requirements call for prompt action on the part of whatever government may be in power. Indeed Mr Charan Singh and Mr Chavan are falling into the habit of accepting conditional employment. While they may not mind the harm this must do to their self-respect as individuals or credibility as politicians, the nation cannot but take note of the fact that, for as long a period as four full months or more, the country will be without an effective government for dealing with its grave problems of economic distress or social unrest.

Again, by opting for a mid-term poll in preference to giving an opportunity to a new leader of the Janata party to form a government and establish its majority in Lok Sabha, the president has failed to discharge, in letter as well as in spirit, his constitutional obligation for exhausting all possibilities of avoiding a dissolution of Lok Sabha before it has run its normal course. Since Mr Sanjiva Reddy has not pleaded, as explanation or excuse, that he acted as he did because he was honestly persuaded that he was bound by the provisions of the constitution to abide by the advice of the Charan-Chavan duplex, it has to be assumed that he took what was purely a political decision involving the exercise of his personal judgment or discretion. It is therefore not only proper but necessary to examine the bona fides of his conduct and it is therefore not surprising that there has been in the wake of his decision dissolving Lok Sabha much critical discussion in the country of his personal purposes or political motives.

Given the disappointment and discomfiture it has suffered, the reactions of the Janata party leadership to the president's "sins" of commission and omission have naturally been sharp and its criticism of Mr Reddy's alleged partisanship acrimonious. Indeed there has been talk of an attempt being made in Rajya Sabha to impeach the president and even if such a move ends up only as a gesture of protest by the Janata party and its allies it would certainly result in involving the office of president in the controversies of party politics. This apart, by giving the impression of having bent over backwards in a successful exercise of denying the prime ministership to Mr Jagjivan Ram, Mr Sanjiva Reddy has wrapped up his actions in a sickly smell of casteism which not all the *attar* which Mr Raj Narain may splash on them could really cover up. It is indeed tragic that Mr Reddy should have failed to give due weight to the emotive impact on the national psyche of a Harijan rising to the highest office in government.

a grave danger

Perhaps even more important than any of the adverse consequences imputed above to the president's decision dissolving Lok Sabha is the objection to the country being forced to go through the ordeal of a mid-term poll in the prevailing political circumstances. While it is just possible that there could be a realignment of political forces resulting in their consolidation possibly into four major political parties or alliances based on minimum common programmes, there is a grave danger of religious and communal tensions surfacing in the political life of the country. It is absolutely certain that Mrs Indira Gandhi's party and an alliance of the Charan-Chavan groupings, with help from the leftist parties, will, both individually and jointly, play up the RSS threat as a key electioneering ploy. Such a strategy will involve the encouragement of the persecution complex or fear complex of minority communities and the exploitation of separatist sentiments or feelings of exclusiveness in those sections of the population.

A frontal onslaught on the RSS, for the political purpose of isolating and weakening the Jana Sangh as a major constituent of the party system in our country, will certainly provoke a violent reaction from this powerful and purposeful political organization, with a cadre strength superior to that of its principal political rivals. This could mean a head-on collision, in the course of the electioneering, between or among the major political forces in the country over the explosive issue of communalism. There is thus a grave risk of communal distrust and antagonism, much of which now lies dormant, being activated into an explosive political issue before the people. The Congress-I and the Charan-Chavan alliance realise no doubt that they cannot reduce the Jana Sangh to a political zero but the compulsions of current party politics are such that they will nevertheless go through the motions of making an attempt to do so and in the process succumb to the temptations of committing excesses of communal propaganda. This situation will not be improved if the natural resentment in the country over what is regarded as an injustice done to the Harijan cause by the president's action in denying an opportunity to Mr Jagjivan Ram to form a government, were to sour the psychological climate for the mid-term poll. In other words by electing for a mid-term poll in the prevailing circumstances, the president may well have placed a premium on divisive forces in the body politic.

State loans and credit policy

THE ANNOUNCEMENT relating to the terms of state loans for 1979-80 has been made by the Reserve Bank at a time when there is so much speculation about the character of anti-inflationary measures and the possibility of a hike in the bank rate. The state governments, however, had to take a decision in this regard as there are 15 maturing 5¾ per cent loans outstanding to the extent of Rs 117.99 crores and falling due for repayment on September 1. As the funding operation has to be completed before the maturity date and the state governments also have to be enabled to raise their requirements for the current financial year through open market loans, the decision has been taken as a matter of routine.

It had, however, been expected that the states would be allowed to raise a larger amount as it had been represented to the central government that they should have a bigger share of the open market borrowings, especially when the capacity of institutions to invest in gilt-edged securities had improved considerably. The anticipations in this regard have not materialised and the states concerned will be securing only about the net amount raised in 1978-79.

improved yield

The increase in the rate of interest on new loans to 6½ per cent from 6¼ per cent on the last occasion is in pursuance of the policy recently adopted by the Reserve Bank to increase slightly the current and redemption yields on new loans for improving the return on investment in government securities by banks and other institutions. An improvement in yield by a quarter per cent was indicated as the state electricity boards have been issuing their bonds at 6¾ per cent.

Twenty one state governments have, thus, come on the market with new loans having a notified amount of Rs 276.75 crores. The new entrant is Meghalaya, there being only 20 loans on the former occasion. As the loans will surely be over-subscribed on September 1, the gross subscriptions can be easily Rs 305 crores, with the states exercising their right to accept subscriptions up to 10 per cent in excess of the notified amount. The net amount borrowed will be only Rs 187 crores as the maturing loans are outstanding for Rs 117.99 crores as stated above.

In 1978-79, the list for 20 loans opened on September 12 and closed within a few hours on being heavily over-subscribed. Against the notified amount of Rs 249.75 crores, subscriptions totalled Rs 296.31 crores, even with the Reserve Bank allotting quotas to individual nationalised banks. There had even to be partial allotment in respect of five loans, after accepting subscriptions up to 10 per cent in excess of the notified amounts. The remaining 15 state loans also were finalised after accepting excess subscription on stipulated basis. As there were 14 maturing loans outstanding then for Rs 96.45 crores, the net amount borrowed was Rs 183 crores. If the experience of the last year is any guide, the net amount borrowed may be even Rs 190 crores. But the marginal increase in net subscriptions realised by the state governments has no special significance in the context of the demand for mobilising additional resources through open market borrowings.

states' share

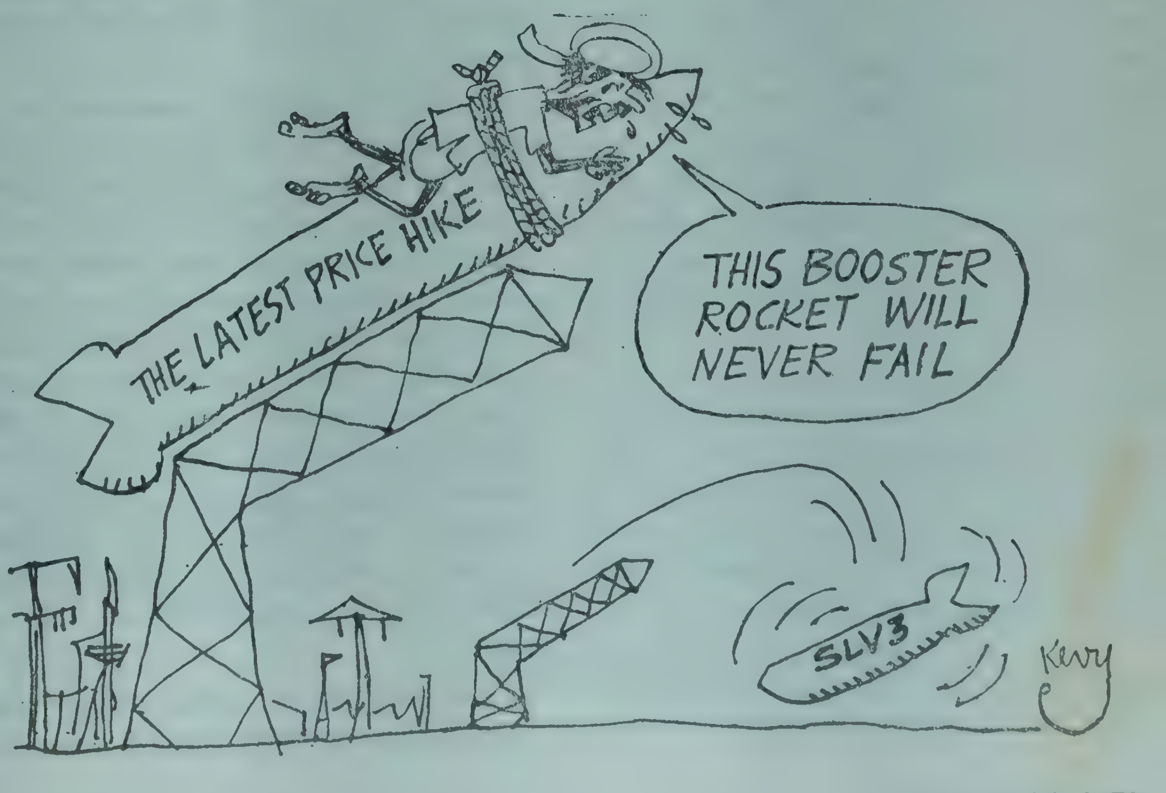
The decision of the Reserve Bank to regulate borrowings by states and virtually restrict net borrowings to the level of last year is perhaps due to the feeling that the states have benefitted substantially from the larger devolution of revenues from the centre following the acceptance of the recommendations of the seventh Finance Commission. The states have also been allowed a large share of the Plan outlay. The centre has, therefore, need for strengthening its budgetary position, especially as there has been an unexpected increase in subsidies on foodgrains and fertilisers, besides an over-run in other non-Plan expenses. There will have to be additional dearness allowances to central government employees, with rising cost of living, apart from larger expenditure on pension benefits and revision of emoluments of defence personnel, border security force and central reserve police.

The grant of bonus to railway employees and others in the posts and telegraph department and defence establishments, even in a modified form may inflate non-Plan expenditure and reduce generation of internal resources of public sector undertakings. There has also been a diversion of Rs 280 crores realisable through higher levies on petroleum products for augmenting the resources of the oil pool over and above the proceeds that may be secured through higher prices for petroleum products in order to recover from consumers the increase in the cost of imported crude and petroleum products and enable the oil refineries and the corporations to function on a reasonably profitable basis.

The central budgetary position, however, has not deteriorated seriously as apprehended in some quarters. Against the increases in expenditure and the loss of revenue, as indicated above, there will be relief in the form of a substantial reduction in the subsidy paid to the nationalised collieries. The recent sharp increase in coal prices should be helpful to the government undertakings to eliminate losses even after increasing the emoluments of workers. The steel industry also will have larger funds at its disposal as a 15 per cent surcharge has been imposed on selling prices. There will also be an increase in capital receipts due to the investment of capital gains of individuals and institutions in rural development bonds. Besides, it should be feasible to raise additionally Rs 200 crores through open market loans even after permitting the public bodies to raise larger resources.

With these gains and strict control over non-Plan expenditure, the overall deficit in the central budget this year can be prevented from rising much beyond Rs 1,400 crores. The deficit can even be reduced to Rs 1,000 crores if industrial production can be raised substantially and receipts from excise duties augmented. While it may be said that central finances have not lost shape badly, the implementation of Plan schemes by the central and state governments has become difficult. Even if the central exchequer manages to adhere to financial targets outlined under the sixth Plan, the physical targets will not be reached because of a sharp escalation of costs.

There is an incorrect understanding of the movements in wholesale prices in recent months. The increase in coal, steel and cement prices is due to official fiat. While it may be contended that a sharp increase in coal and steel prices is unjustified and part of the rise in costs can be offset by higher productivity and production, cement prices had to be raised because of escalation in cost beyond the control of industry and a big increase in outlay of new capacity. The steep rise in the prices of petroleum products has been forced on consumers by the heavy cost of imported crude and petroleum products. High oil prices have accentuated world inflationary pressures and other imports too are proving to be highly costly. The landed cost of imports of different items is likely to increase even in a more pronounced manner in the coming months after the developed countries effect the necessary adjustments in the prices for their exports for offsetting the heavier burden of expenditure on oil imports. There will, therefore, be a continuing rise in the index of wholesale prices for several months and only the extent of increase in indices can be minimised with a higher level of indigenous industrial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production which is cheaper as compared to counterpart imports.

When it is abundantly clear that the re-emergence of inflationary pressures within the country is mainly due to imported inflation, shortfalls in output of coal and steel due to the chaotic situation in Bihar and West Bengal and railway inefficiency on account of the dispute over the payment of bonus and outstanding issues, it is incorrect to expect that monetary measures will have any significant impact on the price situation. Any talk of controlling credit expansion arbitrarily will do more harm than good. There is no escape from expanding credit against costlier imports of crude and petroleum products, steel, fertilisers, cement and various other items. Internally also there will have to be larger credit against coal and steel on account of higher prices, while the cost of production of various industries will rise following the increase in the cost of inputs.

ineffective directives

In this situation, it is no use pretending that incremental advances of the dimensions of 1978-79 or even an increment in these incremental advances by 10-15 per cent will serve the needs of industries. There will also have to be a larger proportion of new credit for being used by borrowers in the priority sectors. In this context, how do the Reserve Bank authorities expect to administer effectively their directives to member banks when they could not be observed fully even when the price situation was not so difficult?

There should, of course, be strict control over advances against sensitive commodities and a careful watch on the movements of inventories of industrial units. But these measures can at best slow down the pace of growth in credit and not prevent reasonable expansion. As the central and state governments also will be affected by inflation in costs when executing Plan schemes and prices will continue to rise within the country even with the best efforts to stimulate production, the central government and the Reserve Bank will have to understand correctly the significance of new forces and pursue pragmatic polices. If it is realised that policies aimed at increasing production and encouraging use of coal and water power to minimise the consumption of oil are more important than monetary measures, it will be possible to evolve appropriate credit and monetary policies.

Exports on the move

NOTWITHSTANDING THE fact that the inflationary tendencies in the economy had gathered momentum during the first quarter of the current financial year, giving impetus to the re-emergence of the lure of the domestic market, exports during this period at Rs 1,462.12 crores registered a substantial improvement — by 25.4 per cent over the figure for the corresponding period last year. Even the April-June, 1978, revised total of exports was exceeded by as much as 14.1 per cent.

Although it is difficult to say as yet what specific reasons contributed to the above phenomenon, there appears to have been some improvement in the unit-value realisation of several items, particularly coffee, castor oil, leather and leather products, jute goods and engineering goods as a sequel to the global inflationary trends also getting accentuated. Some increase in exports during this period can also be attributed to delayed shipments from the previous quarter--the last one of the last year—as difficulties at the ports had held up shipments, especially in east India, of jute and engineering goods.

Another noteworthy development on the export front has been that the final figure of last year's exports now available suggests that exports in that year did much better than reported earlier, despite several adverse factors such as global recessionary trends, sizeable decline in the unit-value realisations of such important items as tea, coffee, pepper and oilcakes, depreciation of the rupee in relation to several foreign currencies, serious transportation bottlenecks and congestion at ports, the increased incidence of go-slow and strikes in the various industries, etc.

The latest data suggest that the export earnings last year aggregated to as much as Rs 5,691.54 crores, as against the earlier revised figure of Rs 5,618.26 crores, which in itself was higher than the provisional figure of Rs 5,544 crores by as much as Rs 74.26 crores. This indicates that the performance of the data collection machinery has deteriorated not insignificantly. It needs to be streamlined and strengthened.

The imports last year are now placed at Rs 6,764.44 crores, as against the earlier revised estimate of Rs 6,703.89 crores, which was Rs 97.62 crores more than the provisional estimate of Rs 6,606.27 crores and Rs 676.33 crores higher than the previous year's revised estimate of Rs 6,027.56 crores. As a result, the trade deficit last year is now placed at Rs 1,072.90 crores, as against the provisional figure of Rs 1,062.27 crores and the earlier revised estimate of Rs 1,085.63 crores.

lower trade deficit

At Rs 1,072.90 crores the trade deficit last year was not only substantially lower than the record deficit of Rs 1,228.52 crores in 1975-76 but also significantly less than the 1974-75 adverse trade balance of Rs 1,189.95 crores. This was in spite of substantial liberalisation effected in the import policy and sizeably increased cost of imports of petroleum products, cement, steel, non-ferrous metals and fertilisers.

Imports during the first quarter of the current financial year, of course, have gone up at a much faster rate than the growth in exports. They were 55 per cent more than the imports during this period last year, the major contributory factor being the sharp increase effected by the OPEC in the prices of crude oil. The trade deficit during April-June, 1979, therefore, amounted to Rs 262 crores.

It remains to be seen how far the global inflationary trends will help our exports this year, for not only are the domestic prices going up but also the protectionist tendencies in the developed countries are getting strengthened. The imports, on the other hand, are bound to multiply fast in value terms because of the hike in the oil prices and larger quantities being imported of several essential industrial inputs. The current year, therefore, may witness an enlarged deficit despite the encouraging trends in exports. Another imponderable factor in this context is how far the exports of mass consumption items will be allowed in the interest of containing the prices spiral.

Last year's sizeable trade deficit, of course, did not make any dent in the foreign exchange reserves of the country. The gold and foreign exchange reserves at the end of March last aggregated to Rs 5,439 crores, as against Rs 4,693 crores a year earlier and Rs 3,051 crores two years ago. Besides these reserves, the country had on March 31, 1979, Rs 365 million SDRs to its credit, as against 162 million SDRs on March 31, 1978 and 187 million SDRs on March 31, 1977. The foreign exchange reserves position continues to be quite comfortable. In the middle of July, they exceeded Rs 5,700 crores, besides the SDRs. The growth in reserves over the year had been slightly over Rs 900 crores.

Engineering exports

THE THIRD annual conference of exporters of engineering goods from the eastern region, held in Calcutta on August 17, focussed attention on some major problems faced by the industries in this area and made several suggestions for increasing exports to the existing markets and for developing new markets. It was revealed that the eastern region in the recent years had been contributing substantially to the promotion of exports of various categories of engineering goods.

According to Mr V.P. Punj, chairman, Engineering Export Promotion Council, the external trade from this region went up from Rs 24 crores in 1970-71 to about Rs 160 crores in 1978-79 and the items exported included consumer durables like sanitary castings, electric fans, pipes and tubes and also capital goods such as wagons, textile and jute machinery and mining equipment. The eastern region hopes to achieve an export target of Rs 250 crores by 1980-81.

But it is significant to note that the exports of engineering goods from the eastern region arise almost entirely from West Bengal. The other states of the region like Bihar, Orissa and Assam hardly make any contribution to these exports. It is true that the engineering industries in these states are yet to be developed in a big way, but, surely, there must be a large number of small industries which can afford to export their products if timely and adequate assistance is provided by the Engineering Export Promotion Council. The council should give proper attention to the promotion of exports from these states also.

It is interesting to see that out of 38 exporters from the eastern region who received certificates of merit for their outstanding performance in 1977-78, as many as 37 were from Calcutta and only one from Bihar! The council has been in existence for nearly a quarter century and therefore the time has come for it to maintain close liaison with all the state governments in the eastern region and tap their export potential.

The Council should also give greater attention to develop the export markets which are nearer to the eastern region. At the Calcutta conference, the export prospects in the USA were highlighted. It was pointed out that in 1977-78, the USA imported engineering goods worth about Rs 30,000 crores from various countries, but India's share was only Rs 36.35 crores. Indian exporters should certainly give greater importance to the USA, but the markets at the doorstep should not be neglected. For example, Pakistan, Bangladesh and the countries of south-east Asia can provide steadily expanding markets for the engineering goods from the eastern region. The council at present has overseas offices in Chicago, Dubai, Dusseldorf, London, Manila, Nairobi and Singapore. It proposes to open two new offices in west Asia, two in Africa, two in western Europe, two in north America, one in Australia, one in east Europe and one in Canada. But why no new office is proposed in south-east Asia?

The council has been collecting market intelligence from its foreign offices and circulating it among the exporters. But is there proper coordination between the council and other official agencies such as the State Trading Corporation and the Trade Development Authority in regard

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IN THE NATION 387-393
Sweet Revenge
State Loans and Credit Policy
Exports on the Move
Engineering Exports
Industrial Licensing : Judicious Relaxations
Power Gap in West Bengal

WINDOW ON THE WORLD 394-398
Upswing in Pak Exports
Energy : US Can be Self-reliant
Swedish Shipyard Turned into Workshop
Upsurge in Afghanistan
Nigeria Needs Foreign Assistance
Oil Exploration in Colombia

MOVING FINGER 399

SPECIAL FEATURE 400
The Power Outlook

POINT OF VIEW
Stagflation Spectre on the Western Horizon—*Prof. P.N. Agarwala* 404
Constraints Analysis of Paddy Production in Balaghat—*D. P. Motiramani, B.L. Mishra & P.K. Bisen* 406
Civil Engineering Market in West Asia —*B. Bhattacharyya* 412

TRADE WINDS 415

COMPANY AFFAIRS 419

RECORDS & STATISTICS
Capital Appreciation in 1977-78 423
World Crude Steel Production in 1974-78 426

to the collection of market intelligence? It is particularly important that the exporters in the small and medium sectors in the eastern region are promptly and correctly informed about the opportunities available in other countries. The Indian Institute of Foreign Trade recently conducted an export potential survey of West Bengal in the course of which it identified several engineering items. The industries concerned should be given the necessary advice and assistance to enable them to develop their export potential.

At the Calcutta conference, West Bengal's Industry and Commerce minister, Dr Kanailal Bhattacharyya, suggested that the shipping freight rates should be equalised in order to give a boost to engineering exports from the eastern region. But how far is this proposal feasible and desirable? Has the West Bengal government examined its implications? In the meanwhile, the state government should see to it that the Calcutta port functions efficiently. In recent months, work in the port has been disrupted from time to time by agitations by some category of labour or the other. The port charges in Calcutta are much higher than in other ports; the labour productivity is lower and most of the equipment is out-of-date. Therefore, if the port is made viable and is able to handle the cargo with efficiency and economy, it will go a long way in improving the competitive capacity of the export industries in the eastern region.

Industrial licensing: judicious relaxations

EVEN THOUGH the licensing policy in respect of location of industries has to continue to be restrictive in terms of the Industrial Policy Statement of December 23, 1977, which aimed at preventing further concentration of industry around metropolitan cities and large towns so as to not only foster the dispersal of industrial activity in the countryside but also to contain the pressures on the infrastructure in the metropolitan and thickly populated urban areas, some significant amendments have been made, and quite judiciously, in this policy last week. The main idea behind these amendments is to prevent sickness in industrial units leading to unemployment. The amendments, of course, will also go some way in removing the genuine difficulties of entrepreneurs and encourage certain types of expansion and diversification of industrial activity without affecting the basic objective of dispersal of industries over wider areas.

fresh guidelines

According to the fresh guidelines issued last week in respect of setting up industries in the above two categories of areas, applications will henceforth be considered in the case of industrial units desiring to shift their activity from their present locations within a metropolitan area to another location in the same area, provided there is no change in the essential nature and the volume of production. Cases will also be considered of industrial undertakings which desire to manufacture new items in the same category as those within the licensed capacity without any significant additional investment or requirement of power. The requests of industrial units wishing to utilise the existing machinery to a fuller extent by operating two to three shifts but without additional investment too will be looked into favourably. The bulk drug manufacturers may be allowed as well to undertake formulation activities at their existing locations, provided, of course, the production of formulations conforms to the limits laid down in the drug policy.

The cases for licences of industrial undertakings situated in industrial areas developed by state governments with infrastructure facilities prior to December, 1977, are envisaged to be decided on merit in consultation with the concerned state governments. The applications from public sector and government departmental undertakings for establishing new production facilities in the metropolitan cities and large towns as well will be considered on merit. The grant of special exemption will be considered from the Industrial Policy Statement of December 23, 1977, in the case of industrial units which predominantly employ handicapped persons or women in non-polluting industries.

The above guidelines will be taken into account by the licensing committee in considering applications for licences or by the DGTD in considering registration cases of industrial units. The cases which have already been rejected will be entitled for a review with reference to the new guidelines issued.

The ministry of Industry has also clarified that an industrial undertaking registered with the DGTD or any other technical authority under the liberalised licensing procedures is required to get its productive capacity endorsed on the registration certificate as required under section 10 of the Industries (Development and Regulation) Act. According to an official notification issued last week, there is a distinction between registration with the DGTD and other technical authorities and registration under section 10 of the IDR Act. The undertakings which fulfill the conditions for exemption from industrial licensing are expected to get themselves registered with the central technical authorities mainly for statistical purposes. The registration does not carry with it any commitment by the government to provide raw materials and other things to such undertakings.

Power gap in West Bengal

THE COMMISSIONING of the first gas turbine power house at Kasba on the outskirts of Calcutta on August 14, 1979, by the chief minister, Mr Jyoti Basu, is a major achievement of the United Front government in tackling the problem of the chronic shortage of power. In last November, the government ordered five gas turbine sets, each with 20 MW capacity, of which two have been installed in Kasba. It is proposed to have two such sets in Haldia and one in Siliguri. The gas turbines between them will generate 100 MW of electricity of which 80 MW will be fed into the south Bengal systems.

All the sets are expected to be in operation by October this year.

The cost of power generated by the gas turbine units will be much higher than that of the coal-based plants because of the high cost of petroleum fuel. It has, therefore, been decided to operate the turbines only during the morning and evening peak hours and whenever the coal-based plants develop some unexpected trouble. The installation of the turbines is a short-term solution to meet the shortage of power. But, as the state government has explained, it will have long-term advantages and will become a permanent addition to West Bengal State Electricity Board's generating system.

sticking to schedule

Meanwhile, the government has announced its intention to expedite the completion of the various power projects whose progress has been considerably delayed mainly due to the indifference shown by the Congress government in dealing with this matter of vital importance to the state's economic development. These projects include the fourth 120 MW unit at Santaldih, the 210 MW unit in Bandel, and the three 210 MW units at Kolaghat. Besides, the Calcutta Electric Supply Corporation is being assisted to complete its new thermal station consisting of four 60 MW units at Titagarh. It remains to be seen to what extent the government will be able to commission these plants according to schedule. The government has to show greater speed and seriousness in implementing these schemes since the shortage of power has crippled the state's economy and has vitiated the climate for investment. Especially in north Bengal, power scarcity has been felt more acutely and both agriculture and industry have been adversely affected.

Speaking on the occasion of the installation of the gas turbines at Kasba, Mr Jyoti Basu complimented the engineers for completing the job in time and expressed the hope that the other projects would be finished soon "so that the days to come are brighter than today". But, really, how bright are the days at present with a daily shortage of 80 to 100 MW during the peak hours in the Calcutta area? Load shedding in August continues to take place almost with the same intensity and frequency as in the preceding months, though there was a marginal improvement for some time a few days ago. It seems that the government is yet to come to grips with the realities of the power situation.

Mr Basu referred to the problem created by the indiscriminate recruitment of about 2,500 people by the previous government, which is costing about one crore of rupees per year. But one wonders why the present government has not been able to fit these people into the existing structure after providing them with the necessary training. Mr Basu observed that the workers in the power plants "are doing their best to keep generation at the maximum". But he regretted that "a handful among them are out to disrupt generation". Mr Basu has on many occasions mentioned about the lack of cooperation from a section of the workers, but it seems that he is unable to deal with them sternly. This is clear from the frequent reports of the power plants being sabotaged, probably with political motives.

For instance, a front page report in the *Statesman* of August 12, said: "During the past few months a series of incidents suggestive of sabotage has given rise to tension and distrust among the employees of the Santaldih thermal power station. Most of the incidents are shrouded in mystery and only one has been recorded with the police as a case of sabotage. None of the incidents detected so far has caused any severe damage but they appear to be deliberate acts, revealing a definite pattern".

Why is the government not taking drastic action against these people? Mr Basu said that the political instability at the centre was affecting West Bengal's development plans. But surely the uncertainty about the supply of power has been a more serious deterrent to the state's economic progress.

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Upswing in Pak exports

THE 34 PER CENT increase in the exports of Pakistan during the nine months to March 31, 1979—to Rs 1164.3 crores from Rs 869.9 crores during the corresponding nine months a year earlier—has evoked optimism that exports during the 1978-79 trading year (ending June 30) as a whole would record an unprecedented upsurge during the current decade. Based on the previous experience, the 1978-79 exports are expected to be as high as Rs 1,740 crores as against Rs 1,297.7 crores in the previous year.

In 1973-74, which is a bench-mark in global trade during the current decade as this was the year when the first major oil price hike was effected by the oil exporting countries, upsetting all calculations, Pakistan's export earnings were of the order of Rs 1,011.6 crores. They rose to Rs 1,028.6 crores in the subsequent year, Rs 1,125.3 crores in 1975-76 and Rs 1,129.4 crores in 1976-77. The highest growth registered during this period, thus, was 9.4 per cent in 1975-76 and the lowest just 1.2 per cent in 1974-75. Even in 1977-78, when exports rose to Rs 1,297.7 crores, the growth was of the order of only 14.9 per cent.

The 1978-79 exports have been of a much larger order than the target set for the year—20 per cent.

The spurt in exports last year is attributed to two major factors : (i) significant increases in the unit-values of the principal items of exports; and (ii) larger shipments of several commodities. Pakistan's main exports are rice and cotton and cotton manufactures. During the nine months to March 31, 1979, the export earnings from rice grew by as much as 53 per cent and those from cotton and cotton manufactures by 58 per cent.

In physical terms, rice exports aggregated to 6.3 lakh tonnes, as against 5.45 lakh tonnes in the corresponding period in the previous year. The exports of raw cotton rose to 53,000 tonnes from 49,000 tonnes and of cotton fabrics to 3.79 lakh tonnes from 3.28 lakh tonnes. Cotton yarn exports more than doubled to 76,000 tonnes from 36,000 tonnes. The increase in the unit-value of rice was of the order of 32 per cent, of raw cotton six per cent and of cotton yarn 16 per cent.

But for the decline in the domestic cotton crop from the target level of 36 million bales to only 27 million bales, the growth in the exports of cotton and cotton manufactures last year would have been even more impressive. This decline prompted the government to reduce exports of raw cotton, particularly long staple, resulting in the export earnings from this item declining by 27 per cent to Rs 61.3 crores during the first nine months of the 1978-79 trading year from Rs 83.5 crores during the corresponding period in 1977-78, so that exports of manufactured products could be increased. The results were wholesome as the exports of cotton fabrics could be raised to Rs 145.7 crores from Rs 127.9 crores and of cotton yarn from just Rs 64.1 crores to as much as Rs 149.8 crores.

Two important innovations were also made so far as the exports of cotton and cotton manufactures were concerned. The subsidised sale of cotton to textile mills for export purposes was replaced by the removal of excise duties on mill output. Generalised export rebates were provided at the rate of 7.5 per cent of the export value in the case of yarn, 10 per cent for grey cloth and 12.15 per cent for finished cloth and cotton made-ups. This resulted in enhanced profitability on the export front, both in absolute terms and related to domestic sales.

The export drive was further intensified by streamlining the rebate procedures for all items of exports. The scheme of standard export rebates was extended to many items. This helped in obviating the cumbersome and time-consuming processes involved in obtaining the rebate on every sale. The lowering of the interest rate in the previous year—1977-78—for export refinancing also assisted the export performance last year.

Along with the upswing in the exports of rice and cotton and cotton manufactures, there was witnessed a very significant increase in the exports of leather, carpets and rugs and fish and fish preparations. Exports of carpets and rugs during the nine months to March 31 rose to 1.723 lakh tonnes from 1.366 lakh tonnes in the corresponding period a year earlier and those of leather to 8,800 tonnes from 6,000 tonnes. The export earnings from these two products increased by 28 per cent and 96 per cent, respectively, as there was a two per cent and 34 per cent increase in their prices also. Fish and fish preparations yielded 19 per cent more foreign exchange, although the increase in their unit-values had been about 30 per cent.

The export pattern during the six months to December last reveals a qualitative change in the composition of Pakistan's exports during the past two years. The share of primary commodities has increased marginally from 28.5 per cent to 28.7 per cent, but that of semi-manufactures which include cotton yarn, has gone up dramatically from 12.8 per cent to 28.2 per cent. The overall share of manufactured goods in Pakistan's exports declined from 58.7 per cent during the six months to December 31, 1977, to 48.1 per cent during this period last year.

Another significant point to be noted about Pakistan's external trade is that the functioning of the transport system and port handling had been made much more efficient than earlier. An army manned national logistic cell had been created for this purpose.

Energy : US can be self-reliant

CAUTIONING THAT more trouble can lie ahead on the world energy front, a US Congress study, released last week, emphasises that the United States has the ability to become self-sufficient in energy within a decade.

It points to five possible future developments that could cause problems : growing Soviet imports of oil, more instability in Iran, terrorist sabotage, political embargoes and strains in US-Saudi relations.

If supplies were cut down for six months five years from now, the study says, the US prices could be expected to rise by three per cent within a year but then subside by 1988. The real gross national product (GNP) would go down by some three per cent, but then return to its historical trend by 1988. Unemployment would go up by about one per cent.

The study observes: "These projections reveal that the domestic economy can recover relatively quickly from energy curtailments of modest size and duration."

However, a more serious economic downturn could occur if the United States puts a lid on oil imports without developing adequate alternatives. In such a case, the study has warned, general price levels would go up by one or two per cent by 1981 and more after that. Productivity gains would be cut virtually to zero. The real GNP growth could be down by as much as 25 per cent in the decade. Both the Federal deficit and the nation's trade deficit would soar and the economy could "teeter on the brink of depression."

However, such a pessimistic scenario, the study stresses, need not take place.

Pointing to the US gas and coal supplies and noting that the US coal mines now have 125 million tonnes of excess capacity, the study concludes : "The United States has the financial and technical capability to insulate its energy needs from the vagaries of OPEC (Organization of Petroleum Exporting Countries) in little more than a decade. An aggressive investment programme to increase productivity and to produce more domestic oil and gas and fuels from renewable resources would sharply reduce OPEC's power. If this were begun immediately, "the United States would enjoy reduced vulnerability as early as 1985 and substantial energy independence within a decade.".

Swedish shipyard turned into workshop

GOTAVERKEN ARENDAL, a ship-building company in Sweden with a standing of 140 years, has popularised a slogan to face the current shipping slump. The slogan is: "If you can build 200,000-ton ship, you can build almost anything." Consequently, this shipyard now specializes in advanced industrial projects apart from ship-building. Any project requiring skill, experience and extensive resources is taken up by this workshop. With more than 100,000 square metres of indoor space, Arendal is by far the largest engineering works in Sweden and, in an effort to most effectively utilize its unique production facilities, is heavily committed to the development of new products and new techniques.

Arendal's chief executive, Rolf Bergstrand, stated recently: "With our background, we base our change from marine technology to products with a higher content of engineering than

Eastern Economist 30 Years Ago

AUGUST 26, 1949

The major problem connected with India's dollar deficit is not the unbalance in trade with the hard currency areas, but the adequacy of the central reserves of the sterling area to meet the demands of the various members. Last week, the potential accruals to and the potential demands on these central reserves were examined in a special article. No sanctity can be claimed for the figures contained in that article, as no sanctity can be claimed for any estimates of the future. The pluses or minuses may easily change, as a result of changes in policy. But the conclusions reached are nevertheless valid, namely that if the reserves are to be maintained at the present level, there should be an increase in the exports of the sterling area to the dollar area of the order of £50 millions, a total ban on the transfer of gold to the O.E.E.C. area, and a contribution by the Fund of the order of £100 million. An increase in the amount of Marshall Aid will make one or more of these requirements unnecessary, but such an increase seems unlikely. In the result, the major problems of the sterling area, which require immediate solutions, are to secure a reduction in prices to help exports and the choice of alternatives if enough exports fail to materialise—as between borrowing from the Fund and dipping further into the reserves.

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foreign orders

In collaboration with the Danish engineering firm of Holder Topsoe, Arendal commenced construction of a $450 million project which will include bargebased ammonia plants for Pakistan. Arendal is doing the project management and main contracting, and Topsoe is responsible for process technology. Arendal will build the barges and erect the plant at the shipyard, then tow it to a point just outside of Karachi when it is completed in 1981. The project is being financed through Swedish export finance arrangements.

The order books of Arendal contain two types of refrigerated cargo ships, two semi-submersible rigs and two large passenger vessels for a Swedish company. It also has an order to build and deliver the world's largest floating dock for the Soviet Union. It will be completed this summer, and will have a lifting capacity of more than 80,000 tons, and will be completely self-supporting.

Arendal has been able to maintain its production value of the last few years, though it has suffered heavy losses due to bad credits. Gradually the losses are being reduced. The government, which owns this shipyard, however, will not accept any loss after 1981. The company has to show its ability to reduce losses and, with the structure it now has, the management is quite hopeful of showing profits by that time.

Upsurge in Afghanistan

MUTINY BY a part of a garrison against the present Afghan government of president Nur Mohammed Taraki early this month led to a reshuffie of his cabinet. Mr Taraki himself has assumed the Defence portfolio with the induction of Dr Shah Wali as Foreign Affairs minister. This has been done to emphasise the determination of the regime to deal with the problem of insurgency with an admixture of toughness on the battleground and moderation at the negotiating table.

The Afghan government wants ,to use Mr Taraki's charisma in the anti-insurgency operations. At the same time, Dr Shah Wali as Foreign minister would present a more moderate view of Afghanistan in the event of negotiations with Pakistan for the easing of the situation as a result of which the two countries are confronting each other. Dr Shah Wali is acknowledged as a mild and less abrasive individual than Mr Hafizullah Amin, the former minister for Foreign Affairs. On the other hand, with the background of his experience, Mr Amin was presumably the obvious choice for streamlining the defence forces to meet the challenges posed by continued insurgency.

The anti-insurgency activities of Afghanistan are being streamlined and in order to better organise and lead the country, Mr Taraki has assumed the leadership and command of all the armed forces. Mr Hafizullah Amin will be the principal instrument to put into effect Mr Taraki's orders and directives in exercise of the command of the armed forces. Mr Aslam Watanjar, who was the Defence minister, moves over to the ministry of Interior in place of Mr Shibian Mazdooryar, who now takes over the ministry of Frontier Affairs. Both these ministries are of crucial importance in the context of the efforts made by the regime to be friendly among the tribal elders and ulema.

The rebellion among Muslim tribesmen has been putting a heavy pressure on the Afghan army. There have been many desertions, including some whole units. The Soviet Union has recently been sending more advisers and equipment, including the advanced Mi-24 helicopter gunships. As may as 1,500 Soviet military advisers and 3,000 civilian advisers have been reported to be involved in the recent fighting. Though no deaths have been reported among the foreigners, some casualties of Russians cannot be ruled out. Afghan casualties were reported to be high because of the proximity of the firing to the densely populated area. There have been earlier mutinies of soldiers in Jalalabad and Herat, where in April dissident troops and rebel tribesmen took over the city for two days before being bombed into submission. Some Russians were believed to have been killed there.

blaming infiltrators

The Afghan administration has blamed "Pakistani and Iranian infiltrators" for the anti-government activities. Addressing a group of tribal elders of Bajawar region recently, president Taraki warned the Iranian fanatics" and "Pakistani reactionaries" that the Afghan revolution was a great force and that they could not stem the revolutionary tide in the entire region by aiding and abetting the Afghan insurgents.

Mr Taraki made a direct appeal to the various "nationalities" of Iran to defend the Afghan revolution if the Baluchis, Kurds, Arabs, Turks and others of that country are to win their "inalienable national rights". His open call to the Iranian nationalities has been viewed as a clear notice to the Iranian leadership that the Afghan regime may not hesitate to carry the struggle into their territory if they continue their reported assistance to Afghan rebels.

Mr Taraki simultaneously held out the olive branch and offered peace to both Pakistan and Iran if they stopped their interference in Afghanistan's internal affairs. He said: "Pakistan should not send against us men under the name of fugitives, refugees or under any other name. Then we can have harmonious life with them. Of course, this is our wish, but Pakistan should also extend the hand of friendship and should not interfere in our internal affairs." On relations with Iran, he observed: "There is no big hurdle between us which could separate us or bring us to war. We want them to leave aside their fanaticism and not to interfere in our internal affairs. If the leaders of Iran leave aside their instigation and responsibility for Shias and live with us as good neighbours, then we will have no differences with them".

Nigeria needs foreign assistance

WHEN THE civilian government assumes power in Nigeria in October this year, it will have to accord top priority to the development of health, housing, roads and telecommunications. These are the primary needs and any government which comes to power will have to meet them. But it is generally believed that like most other African states, Nigeria cannot undertake its development projects successfully without foreign assistance.

Nigeria's present oil output, placed at around 2.4 million barrels a day, compared wirh 1.9 million barrels a day in 1978, has, to a considerable extent, given the country the required self-confidence. The earnings from the export of oil account for 90 per cent of total export earnings, 80 per cent of government revenues and 30 per cent of GDP. With a population approaching 100 million, Nigeria, however, cannot depend entirely on its oil earnings to finance the ambitious development projects.

Nigeria needs long-term foreign investments for the development of industry, infrastructure and commerce. Mr G. O. Onosode, the chairman of Nigerian stock exchange, pointed out recently that "we do not wish to promote this development in a way that would create an unacceptable problem for the future. We are tackling the question of equity participation by indigenous people and control of those areas which we believe should be controlled by Nigerian citizens and associations. Simultaneously, we are encouraging participation by our friends, those who share the same basic commitments with us on fundamental issues such as freedom and liberty. These, then, form the parameters within which we expect foreign investors to participate."

All Nigerian enterprises have been classified into three categories. The first one includes companies which must be owned and run by Nigerians only, such as the retail business. The second category includes the companies and firms in which foreign ownership and control are limited to 40 per cent, such as the manufacturing and extractive industries. The third one covers enterprises in which foreign participation is limited to 60 per cent. These enterprises are usually the high-technology industries.

In certain special cases, the Nigerian federal military government has been purchasing outright ownership of corporations and then reverting the stock to the market for purchase by Nigerian nationals. Such practices could not be described as government "policy" but the government "does consider doing this on an ad-hoc basis from time to time", according to Mr Onosode.

Oil exploration in Colombia

COLOMBIA IS giving top priority to its oil and gas exploration programme in response to the country's energy requirements. Indigenous oil output has been declining steadily since 1970 with the result that imports in 1979 may reach 23 million barrels, more than one-third of the national consumption. The exploration drive is designed to make Colombia self-sufficient in oil.

A substitution programme designed to replace oil products with natural gas wherever possible, and gas with coal may not be helpful in reducing oil imports as Colombia's oil and petrol imports may be costing more than $2,000 million a year by the late 1980s. Intensive oil exploration in areas which hold out good possibilities, therefore, becomes urgent even though they may not have good transport facilities and drilling may be costlier. Most of the Caribbean coast has been contracted for exploration following big natural gas finds offshore in the Cartagena and the Guajira areas.

attraction for investors

Colombia has held great attraction for foreign oil companies since the last government agreed to pay the international price for crude discovered under the association system. Several transnationals have returned to the country and a number of companies are negotiating to explore new areas. Over the first few years, an average of 10 contracts have been signed annually in association with the state oil corporation, Ecopetrol, and over eight million hectares are covered by exploration agreements. Ecopetrol reports that 38 exploratory wells had been drilled with a total investment of $122 million up to September 1978. The original aim, established by the last administration, was to drill 800 exploratory wells costing $1500 million over 10 years. Ecopetrol's exploration targets have now been raised considerably and the state corporation plans to invest $.77 million this year.

In contrast with oil, natural gas production may be increasing over the next few years as more coastal fields come into operation. Reserves in the Guajira area alone are estimated at more than 3,500,000 million cubic feet.

To develop alternate sources of energy, Colombia may have to invest about $35,000 million in electricity, gas, oil and coal by the end of the century. On its own, Colombia can probably finance 30 to 40 per cent of this, according to Mr Alberto Vasquez Restrepo, Colombia's minister for Energy. Plans for the electricity sector alone call for $10,000 million to be spent up to 1985, more than doubling the capacity and significantly decreasing the proportion generated by oil and gas derivatives. Coal production also may be in full swing before the mid-1980s, replacing oil products in cement works and thermal power stations. Colombia also has begun to explore uranium deposits systematically and production from a small nuclear power station also may begin in 1990.

MOVING FINGER

Contrary to what clever people seem to imagine it is not easy to live down one's past. This holds good especially in the case of politicians. Mr Sanjiva Reddy, in his time, was as scheming and cynical a politico as they come. It is therefore only natural that his speeches and statements, particularly because of thier oozing piety and suspicious solemnity, have come to be taken with a liberal pinch of salt. In his address to the nation on the eve of the Independence anniversary, he has taken advantage of the current political situation to sound a call for "national reconciliation." This exhortation may not be as innocent as it sounds, since one of the great political controversies of today—and one which is basic to our democratic values—is whether the emergency tyrants are to be allowed to go scot-free. To the extent there is political consciousness in the country, there is widespread opposition to power-hungry political leaders striking bargains with Mrs Indira Gandhi and her coterie. The issue goes far beyond the simple question of crime and punishment. The legitimization of Mrs Gandhi carries the gravest risks for the future of our still uncertain democracy. It is no doubt unnecessary to exaggerate the specific threat which Mrs Gandhi herself personally presents. Durga, after all, is a myth. But her resurrection and restoration as a relevant force in our public life will certainly put a premium on authoritarian—and let me say it, fascist—tendencies in our polity.

In these circumstances, it is incumbent on the president of the sovereign democratic republic of India to spell out what he has in mind when he talks of national reconciliation. If all that he is trying to suggest is that he himself should be chosen by consensus to head a national government, his ambition may be dismissed as no worse than mildly amusing and slightly ridiculous. If, however, what he would advocate openly if he would dare is that the special courts should be scrapped and the emergency cases withdrawn as a means of ending what he describes as "confrontation" politics, the question must be asked whether he is loyal to his oath of office as the defender of the Constitution.

Since I am writing this two days ahead of August 20, I do not want to take too seriously Mr Charan Singh's Independence Day address. I must, however point, out that to grow into a statesman of national significance and authority may not be an automatic consequence of manoeuvring oneself into the chair of the prime minister. Mr Charan Singh was, is and will be a BLD boss, a regional political chieftain at best. While it is true that the nation could do very well without idols or idolatry, its essential diversity demands for political stability an opportunity for its people to identify themselves to some extent with a national leader or leadership. It is clear that Mr Charan Singh can never serve this totemic purpose. The Press Information Bureau of the government of India cannot edit this truth out of the records of our times.

In the "editor's notebook" of *Commerce* of August 11, Mr Morarji Desai's exit from active politics is compared to the exit of Churchill after the second world war and of General de Gaulle after the student agitation in France in the late sixties and, for good measure, there is also the sapient observation that people have a habit of getting rid of their "crisis heroes" as soon as the crisis is over. This could have been dismissed as a harmless hyperbole had it not been perpetuated by Mr Vadilal Dagli, who has profited considerably from his influential connections in the establishment of Mr Desai including the H.M. Patel annexe. Courtiers should always remember that they should find other means of showing their gratitude than by indulging publicly in the fulsome flattery of their patrons. I do not know whether Mr Desai feels deeply hurt—as Mr Dagli suspects that he does—that the people have not shown enough of gratitude for his "epoch-making services." But for the sake of the erstwhile prime minister I very much hope that he is content to leave it to less committed commentators than Mr Dagli to work out in their own good time their assessments of the Desai prime ministership. That the balance-sheet, when drawn up in this manner, will have a lot to show on the credit side I would of course be the last person to deny. But I refuse to take Mr Dagli's word for Mr Desai's historic greatness.

According to the news magazine, *Time*, the top attraction for unemployed youth in China's cities currently is, besides the Charlie Chaplin movies, *Awara*, "an Indian melodrama about a disaffected youth who becomes a vagabond after being spurned by society." According to *Time*, this film "is something of a cult classic, particularly for former members of chairman Mao Tse-Tung's rampaging Red Guards, millions of whom were assigned to communes for re-education during the 1968-69 Cultural Revolution." This Raj Kapoor starrer is of course an old hand at making friends and influencing people in communist lands. Writing in *Swarajya*, Mr M. Chalapathi Rau recalls the "shock" administered to him many years ago by a woman professor of gynaecology in Leningrad with whom he found himself discussing, of all things, Indian films. When asked which Indian film, of those she had seen, she liked most, pat came the reply "Awara". Mr Chalapathi Rau, obviously, was behind the times even in those remote days.

VB

Special feature

The power outlook

An ambitious programme has been launched for augmenting the power generation capacity during the current, sixth, Plan period. This is not without justification. Power scarcity during the recent years has played havoc with the economy. Industrial circles feel that the investment climate has been affected not insignificantly by this one factor.

The installed generation capacity is envisaged to be raised to 44,500 MW by 1982-83, which would mean an addition of 18,500 MW during the five years of the current Plan. The growth rate has been stepped up as last year 3,000 MW were added, though the entire additional capacity could not be fully synchronised. The latest phasing out of the schemes under implementation or those to be taken up in the near future suggests that 3,165 MW additional generation facilities will be put up during the current financial year, 3,274.5 MW next year and 4,472 MW and 4,764 MW in the subsequent two years. Till lately, the annual addition to capacity had been around 2,000 MW.

The proposed programme is not beyond accomplishment as the schemes being implemented or proposed to be taken up have not only been funded already but also meticulous planning has gone in before launching them. The generation sets which are now being put up are of much larger capacities than had been the case earlier—mostly 200 MW to be followed in the near future by 500 MW.

The development programme has been drawn up with the objective of eradicating power shortages by 1982-83 in all the regions, except the eastern zone where the capacity to be added is not expected to be commensurate with requirements. Despite this pious hope, however, it is generally felt that because of such reasons as the work-force getting attuned to operating larger capacity sets, the unsatisfactory position on the coal front, the unpredictable behaviour of monsoons and lags in the strengthening and inter-linking of the state transmission systems, shortages of power may continue not only in the eastern region but also in some other parts of the country, even though on a much reduced scale. These shortages, of course, can be mitigated a great deal further, if not fully overcome, if the operational efficiency of the installed capacity is raised for which there is considerable scope.

In this article, the power supply outlook has been discussed by Mr Nikhil Bhattacharyya and Mr R.C. Ummat. Emphasis has been placed on obviating slippages in the implementation of the planned programmes, improving the operation of power stations and making of efforts at demand management to even out peak loads. Attention has also been drawn to the fact that there is need for a more efficient and rational use of the available power supplies.

THE INSTALLED power generation capacity in the country on March 31, 1979, aggregated to 29 million kw (29,000 MW). It was just 2.3 million kw (2,300 MW) in 1950-51 when the planning era began. Similarly, the year 1978-79 witnessed a record production of 103 billion units. The production in 1950-51 was of the order of 7.5 billion units only.

The above massive growth in the generation capacity, however, has not created any comfortable situation in the country. The supply of electricity, a basic infrastructural input for economic growth, continues to be tight. Persistent shortages are being reported from various parts of the country. The industrial managements feel that due to uncertain availability of power, the investment climate has been affected.

The current shortages of power, totalling to 20/25 million kwh a day, are the net result of slippages in the implementation of the planned projects and deficiencies in the management of generation, transmission and distribution. These nobody denies.

In the draft five-year Plan for 1978-83, the targets for the development of the various sectors of the economy have been projected consistent with the objectives of economic development. The demand for electricity has also been projected keeping in view the targets of output of agricultural, industrial and other sectors of the economy.

The requirements of electricity of major industries have been worked out based on their targets of production. According to these projections, the requirements of electrical energy at the power station bus-bars are expected to increase at an average annual growth rate of about 10.5 per cent. The aggregate generation required by 1982-83 will be 167.02 billion units A target of 167 billion kwh, therefore, is being thought of.

There have been shortages of power and restrictions on consump-

> The draft Plan 1978-83 attaches high priority to power development and places emphasis on rapid expansion of power supply facilities to meet the growing requirements for power and wiping out backlog in power development. A massive programme of adding about 18,500 MW and reaching the total installed capacity of 44,500 MW by 1982-83 is envisaged.

tion in several parts of the country. There are also substantial amounts of suppressed demands, particularly in those states where shortages have been continuing for a long time.

The working group on power for 1979-80 to 1983-84 has found that the load growth has been very fast in those states where adequate power is available, This is substantiated by what has happened in Punjab where growth during the summer of 1978 had been as high as 60 per cent over the corresponding period in the previous year.

It is an admitted fact that planning in any sector has two aspects—estimates of demand and steps taken to create adequate supply to meet the demand. Figures of demand given by the customers are bound to be on the high side. This should be taken into account while planning for future growth rates.

The ministry of Energy has constituted the eleventh annual power survey committee to review and recommend modifications, if any, in the methodology adopted in the tenth and earlier power surveys and review the projections of the tenth annual power survey committee up to the period 1983-84 and the perspective demand up to 1995-96 to be further extended upto the year 2000 AD. The eleventh survey committee is presently engaged in collecting the necessary data required to deal with its terms of reference.

The draft Plan 1978-83 attaches priority to power development and places emphasis on rapid expansion of power supply facilities to meet the growing requirements for power and wiping out backlog in power development.

A massive programme of adding about 18,500 MW and reaching the total installed capacity to 44,500 MW by 1982-83 is envisaged in the draft plan.

An outlay of Rs 15,750 crores has been provided for new generation—double the outlay of the fifth Plan. This would be about 23 per cent of the total outlay envisaged in the public sector in the draft.

This big step-up is indicative of the importance attached to power development.

A very significant feature of the power programme during the five-year period to 1982-83 is that all the schemes included in it are either ongoing projects or the already sanctioned ones for which funds have been provided in the current year.

This has been possible as the power planning exercises relating to the sixth Plan and advance action on many identified schemes for yielding the benefits in the sixth Plan were initiated during the fifth Plan itself.

The ministry of Energy sources claim that the power programme during the current Plan started with greater preparedness than those of earlier plans.

In choosing schemes for thermal power development, extensions at the existing and ongoing project sites have been preferred to virgin sites. Larger unit sizes are also being adopted consistent with system conditions to effect economies in costs and reduce construction time. Bulk of the thermal generating capacity will be derived from 200 MW and 500 MW sets will follow.

According to the latest assessment, the year-wise phasing of the benefits from the new schemes from the current year will be 3,165 MW in 1979-80, 3,274.5 MW in 1980-81, 4,472 MW in 1981-82 and 4,764 MW in 1982-83.

If an allowance is made at the rate of one per cent of installed capacity being retired per year, the regional break-down of installed generating capacity anticipated at the end of 1982-83 would be—northern 11,315 MW, western 12,000 MW, southern 9,759 MW, eastern

Regionwise Breakdown of Installed Capacity
By end of 1976-77

(Figures in MW)

Region	Hydro	Thermal	Nuclear	Total
I. **Utilities**				
Northern	2,699	2,760	220	5,679
Western	1,684	3,845	420	5,749
Southern	3,848	1,877	—	5,725
Eastern	885	3,508	—	4,393
North-Eastern	79	189	—	268
Total	**9,195**	**11,979**	**640**	**21,814**
II. **Non-utilities**				**2,225**
III. **All India**				**24,039**

7,162 MW and north-eastern 825 MW.

The Central Electricity Authority has carried out detailed region-wise studies of power availability and anticipated power supply position from 1979-80 to 1982-83.

The power supply position that emerges out of the study in various regions in 1982-83 indicates that energy availability would be, by and large, adequate in all the regions, except the eastern, at the end of the Plan period. The country is likely to have a surplus of 7,272 million units of power during the terminal year of the Plan.

In the context of the acute power shortage being felt in several parts of the country, particularly close to metropolitan areas, installation of gas turbine generating units have also been proposed by the Energy ministry as a short-term measure. So far, three states have been allowed to instal gas turbines. They are Maharashtra, Assam and West Bengal.

The entire power planning and supply assumptions have been made on the basic idea that the constituent power systems in each region would be operated in perfect integration ensuring optimum utilisation of available capacity and there will be no constraints on free flow of power from one station to another.

An Energy ministry study shows that the shortage of energy, which was about 15 per cent during 1977-78, has come down to about 10 per cent during 1978-79.

During the last year, about 3,000 MW of capacity was added. The additional installed capacity will get stabilised in a period of about six months. From October 1979, onwards, therefore, there should be a substantial increase in the energy production.

The region-wise present position of supply of power and the prospects for the rest of the year will be as follows.

During 1978-79, the northern region registered the maximum increase in energy production of 20 per cent over 1977-78. During 1978-79, 1,115 MW of additional capacity has been added in the region and in the current year about 736 MW of capacity is likely to be added.

In the western region, there had been in 1978-79 an increase of seven per cent in energy production over 1977-78. The region had a record addition of 1,210 MW to capacity in 1978-79. This year about 750 MW capacity is likely to be added.

The southern region, which saw an addition of 395 MW capacity during 1978-79, is likely get new capacity of 400 MW during the current year.

The average increase in energy production in the country during 1978-79 has been of the order of 12 per cent. However. the eastern region registered an increase of only 1.7 per cent. The addition in installed capacity in this region last year was 242 MW, but in the current year the additional capacity likely to materialise will be 400 MW, In the event of breakdown of the thermal generating units in the region. hydro peaking assistance is not available in good measure and the region suffers from peaking shortages.

The power supply position in Orissa is satisfactory, however, peaking shortages in West Bengal and Bihar persist. The total installed capacity in West Bengal is 1,350 MW against which, however, the generation varies from 600 to 700 MW. Despite outside assistance,

Installed Generating Capacity Expected to be Created† by 1982-83

(Figures in MW)

Region	Hydro	Thermal	Nuclear	Total
Utilities				
Northern	4,863	6,125	675	11,463
Western	2,069	9,435	420	11,924
Southern	6,328	3,667	470	10,465
Eastern	1,199	6,218	—	7,417
North-Eastern	396	436	—	832
Total Utilities	**14,655**	**25,881**	**1,565**	**42,101**
Non-Utilities				**2,525**
All India				**44,626**

OUTLAY

	(Rs crores)
Generation	8,750*
Transmission and Distribution	5,300
Rural Electrification	1,450**
Survey and Investigations	230
S & T	20
Total	15,750

*Excludes investment in non-utilities.

**Excludes Rs 300 crores from financial institutions.

†Does not take into account the capacity that may be retired.

there is a peaking shortage of about 200 MW in West Bengal.

There has been an increase of about 10 per cent in the energy production in the north-eastern region last year. Sixty MW hydro capacity was added during the year.

R. C. Ummat adds:

The above should show that power shortages in the country should start getting mitigated substantially from the next year onwards. But this assumes that hydel generation will not be unduly upset by insufficient rains. Although significant relief in the situation, as pointed out above, is expected in the power supply position towards the end of this year, the inadequacy of rains till lately has cast a shadow and should the rains in September not come up to expectations, hydel generation, which contributed markedly to the increase in power generation last year, may create complications.

Another imponderable on the power front is whether it will be possible to implement the coal production programmes as envisaged in the Plan. Indications are that the 1982-83 target of coal production might be reduced marginally to 143 million tonnes from 149 million tonnes proposed in the draft Plan. The misgivings in respect of the coal development plans arise out of the fact that the coal situation leaves much to be desired at present. It remains to be seen how far the industrial relations in the colliery areas would be maintained at a satisfactory level in the years to come.

Another important fact to be recognised is that the power supply position in the eastern region, even according to the Plan document, is expected to remain tight right up to 1982-83. This, undoubtedly, will have serious impact on the coal output in the eastern region, the most important source of this type of energy.

To some extent, the proposed prunning of the 1982-83 outpur targets of some major industries will be helpful in containing the demand for power. The industries falling in this category are nitrogenous fertilisers (prunning of the target by two lakh tonnes to 39 lakh tonnes) and steel (by 0.33 million tonnes to 11.74 million tonnes.) Correspondingly, however, the targets of production for such industries as cement, paper and paper boards, commercial vehicles, etc., are being raised marginally. Those of crude aluminium, phosphatic fertilisers, textiles, etc., are being maintained. As such, the reduction in demand for power may not be very large.

interstate transfer

Some doubts are also being expressed in various circles whether it will be possible by 1982-83 to strengthen the power transmission systems in various states and their inter-linking so as to facilitate the transfer of power from the surplus to the deficit areas. Any leeway in the implementation of these programmes would cause distortions in the supply system.

The situation, however, can improve considerably if the management as well as the operational efficiency of the generation projects is improved. There is no disputing the fact that the performance of many power projects at present leaves much to be desired for one reason or the other, including the workforce getting used to handling larger capacity generating sets. Serious thought needs to be bestowed on this issue.

There is also a case for a concerted drive to bring down the excessive transmission losses and thefts of power. Demand management will be needed to even out the peak loads. The latter method, if efficiently used, in the agricultural sector, indeed, should not affect output. If power is shut down for farming during the evening peak-load hours, the supplies during the remaining hours can fully meet the requirements of agriculturists.

growing realisation

It is encouraging to note that a feeling is growing amongst the policy-makers that the available power supplies are not being very efficiently utilised in the country. One per cent growth in our gross domestic production, it is pointed out, has necessitated power consumption going up in the past by 2.7 per cent and the overall energy use by 1.9 per cent. The latter ratio is around unity in the advanced countries—in some cases, even less than one per cent.

A more rational use of power as well as the other sources of energy will require not only some changes in the structural development of the country but also an ambitious programme of up-dating of technology in the industrial sector, the need for which is even otherwise considered to be imperative.

In sum, although an ambitious programme for power development is planned to be executed during the next three years, yet it will be erroneous to assume that power shortages will end throughout the country by then. Apart from the eastern region, where even according to the Plan document, there will be some deficit, shortages may continue, even though on very much reduced scale, in some other parts of the country as well, unless slippages in implementation can be fully obviated and the operations of the installed capacities are improved significantly.

Point of view

Stagflation spectre on the western horizon

Prof P. N. Agarwala

The new developments on the oil front have sent a shiver down the spine of western economies and realisation has dawned on them of conserving supplies and building up alternative sources of energy. But the spectre of a recession is looming large on the western horizon and there is no let up on the unemployment scene. The author believes that the impact of this slow-down on the Third World economies will be shattering. The remedy according to him is in increasing inter-regional as well as intra-regional trade. India needs to greatly strengthen her commercial diplomacy and train her executives in international trading practices.

FOLLOWING THE commodity boom and global inflation of 1972-73, the western economies plunged into the severest post-war recession in 1974-75. There was a mild recovery in the subsequent three years, although unemployment stayed at the high levels of 5 to 7-8 per cent in the USA, Canada, the UK and even West Germany, France and Italy. It was strongly felt that inflation had to be halted if economic recovery was to be hoped for at relatively stable levels. Till 1978 inflation was slowing down a little.

Oil prices in 1977-78 were largely stable and plentiful. However, since the end of 1978 the pressures on the oil supplies have been growing apace. The Iranian crisis compounded the situation as also the unprecedentedly severe European winter. Ever since the beginning of 1979, the oil situation is under great stress, especially due to the frantic bid to replenish stocks and the feverish bids at the Rotterdam spot crude market which skyrocketed the prices to $30 to $40 per barrel in place of $14.55 which was fixed at the last OPEC meeting. The oil crisis of 1973-74 had no doubt created a terrible dent in the western economies, yet by the end of 1978 west European countries had not only managed to recycle most of the petrodollars but had also contrived to largely overcome the grave imbalances by increased exports to the Gulf countries. Only the USA had not been able to reduce its adverse balance of payments and increasing dependence on oil imports from Saudi Arabia, Nigeria, Libya, Algiers, the UAE and Kuwait, besides Mexico, Venezuela and Indonesia, after trans supplies were effected.

The US domestic production, including from the Alaskan fields, is around 3½ million barrels per day and seems to have reached the peak. Apart from Alaska, the other fields had passed the peak in 1971 and recovery prospects from shale oil, tar sands and coal gasification are not so easy and promising at economic levels. There is also a great disinclination to engage in uncongenial tasks like coal mining both among the workers in the USA and west Europe. Owing to the extended welfare measures, the workers are under no strain to take up such challenging tasks and prefer to remain on 'dole'

conservation measures

In western Europe, particularly France and Denmark, there has been a spurt in conservation measures to reduce energy consumption in the last four years. The French have also mounted a concerted programme to raise their nuclear energy so that by 1985 over half of the French energy requirements will be largely met from nuclear, hydro and thermal sources. In the UK, the conservation attempts have so far been minimal; thanks to the North Sea oil/gas and Britain's large coal resources. However, half of the North Sea oil is exported as it fetches high premium being of low sulphur content. The North Sea oil can hopefully meet three quarters of UK's energy consumption needs by 1980-81. The Netherlands has large gas supplies and Norway may come on stream. West Germany is largely dependent on oil imports as its workers are not very keen to work in the Ruhr coal mines. It could conceivably import coal from Poland and Australia, if need be. Its large payments surplus is a very great cushion for such needs. Italy is highly dependent on oil imports, although it has been able to greatly reduce its trade deficit and the lira is holding well.

The new developments have sent a shiver down the spine of the western economies. The realisation of conserving supplies at existing levels and building up alternate sources of energy is at least beginning to dawn on them. The recent EEC summit at Strassbourg and the seven-nation summit at Tokyo are a pointer in this direction. Even in the USA the energy situation is at last beginning to bite, although the measures taken so far are still very much behind those of the west European economies. No doubt the US car industry is faced with the problems of retooling and anti-pollution equipment, it has increasingly came under pressure of foreign car imports in the last four months, particularly Japanese cars. The strengthening of the doller since November, 1978, vis-a-vis the yen has made the Japanese cars more competitive apart from their appeal of fuel saving, slick appearance and sturdy efficiency. Even in the UK, the car imports are surging thanks to the strength of the sterling in recent weeks and the inroads Japanese have made.

a sea-change

The western scene has, however, undergone a sea-change in its resolve to slow down inflation. Even in the UK, the inflation is today running at around 20 per cent per annum, although the official forecast is of 17½ per cent. The new UK budget has increased the value added tax and large imports have been made on petrol and items of consumer expenditure lately even though the direct taxes on the highest slabs have been slashed. In the USA also, the inflation is now running in double digit levels. It may well touch 12 per cent per annum even though food prices have not been rising so fast lately. The inflation is now well above 10 per cent in France and even in countries such as Switzerland and West Germany it is nearing nine per cent from the earlier level of three per cent or so in Germany and one to two per cent in Switzerland. In Italy, the Benelux countries and Scandinavia, it is in double digits and even higher in case of Portugal, Spain and Greece. Not only has double digit inflation now come to stay, there is no serious resolve to slow it down as was the case after 1974-75.

gloomy forecast

The spectre of another severe recession is looming large on the horizon of the western economies. It could even be as severe as the last one and there is no hope of any let up in the unemployment scene. Thanks to the large welfare measures taken in the post-war years in Europe and the extended welfare given by president Johnson in his 'Great Society' programme, the work ethic has been greatly weakened in western economies. The workmen have become more choosy and take welfare for granted. The relentless pursuit for efficiency and excellence has lost its momentum in recent years. In the USA the productivity has not increased significantly in the current decade of the seventies and growing signs of a fall off in productivity even in western Europe are now discernible. If the productivity cycle is not reversed, the economies can hardly be expected to recover their bounce in the eighties. Not only have the USA and western Europe become increasingly dependent on oil imports, but even in regard to raw materials, minerals, non-ferrous metals their dependence is increasing significantly. Chromium is a case in point.

It is becoming increasingly questionable if the western economies will be able to retrieve the position of a reasonable degree of growth with stability. The era of the sixties is now a far cry. Even though the thought of war is anathema and repugnant, yet some noises are being heard in this direction. One has only to recall that even in the last war, the results for both the victors and vanquished were disastrous. Look at Britain which won the war and nearly lost its hegemony and its pride of place. Both West Germany and Japan went through terrible times from 1945 to 1948 and recovery was very painful though in the sixties and seventies they overtook the victor. In today's context, the idea of another holocaust is nightmarish. There will hardly be any victor or vanquished. The world economy, therefore, has to come to terms with the existing reality and work out measures of peaceful cooperation in which not only the developed countries but also the developing ones of the Third World will have a reasonable chance to eke out an existence and provide some measure of hope for the growing aspirations of their people in a time-frame possibly of next two decades or so.

The impact on the Third World economies of this slow-down in west and fantastically high oil prices will be most shattering. The rising trend of protectionism will lead to greater imbalances. The Third World's debts are already $220 billion and it is expected that the amortisation/interest repayments may touch $35 to $40 billion this year. This calls for a moratorium and conversion of most of these loans into grants. Also the need for stepping up the official aid assistance to 0.7 to 1.0 per cent has never been greater. It is, however, most doubtful if in the present context, the western economies will be enlightened enough to increase aid, write off debts and lower the tariff and non-tariff barriers and restructure the international monetary system.

effect on Third World

No doubt, the long term health and viability of the world economic system will largely depend on coming to terms with the existing realities. Even the present floating rates have not been the answer to the breakdown of Bretton Woods. Even under the Europe monetary system there is a five per cent spread between buying and selling and conversion into a reserve currency and the final currency above eats up 10 per cent of the face value. This is beside the wide fluctuations taking place. The Third World countries are being put to their severest test. The prices of their produce, raw materials and processed goods are fluctuating while the import prices of the machinery and capital goods are increasing, The terms of trade are increasingly turning against them even though some advances have been made in commodity prices lately. This is however, insufficient to cushion them against the averages of inflation. The new oil price hike will be far more damaging as the commercial banks will not be able to bail them out. The remedy seems to be in increasing inter and intra-regional trade among the Third World countries as some of them like India are today able to offer intermediate and low production technology which is labour intensive and more suited to their genius and culture. Also we can share our large pool of technical skills and expertise.

The Third World countries have too long looked to the metropolitan powers for technology and skills. The time is now propitious for them to forge closer links with each other and partake of the available pool of appropriate technological knowledge. We need to know more of each other. There is as yet no centre to study the developmental plans of 114 countries in depth and to identify clearly areas where we can usefully inter-mesh. Also we must strengthen our shipping, banking and insurance presence and set up branches of export houses, export promotion councils and the TDA in these regions/countries. We need to greatly strengthen our commercial diplomacy and train and orient our executives into international trading professionalism if we are to fill the vaccum that is clearly emerging and to help achieve collective self-reliance. If we miss this opportunity, it may be too late. Already Brazil, Mexico, South Korea and Taiwan are racing ahead. India can afford to lose no time.

Constraint analysis of paddy production in Balaghat

D.P. Motiramani, B.L. Mishra & P.K. Bisen

The yield rates of rice crop in Balaghat district in Madhya Pradesh were found declining during the past decade. With a view to finding out the reasons for this the authors undertook an analysis of the trend. They found that the yield potential of paddy in the district is as high as 45 quintals per hectare yet actual yield is not only low but also highly unstable. The constraints noted by the authors are undulating topography of the fields, use of poor quality seeds and non-availability of crucial inputs at the village level.

RICE IS the staple food of more than 60 per cent of world's population. It provides about 22 per cent of the global supply of calories and nearly 17 per cent of proteins.* Among the rice growing countries, India has the largest area (27 per cent) under this crop, contributing hardly one-fifth of the world production. The yield rates of paddy in India are the lowest in the world, which is a matter of great concern to the public and the government.

The gaps between the yield potentials of the various varieties of paddy and the actual yields obtained by farmers are an eye-opener both from the spatial and temporal considerations. Despite the vigorous efforts made by the government through the strengthening of the extension agencies, spreading of the technical know-how and the implementation of the various agricultural development programmes, the yield gaps have remained alarmingly wide. The 'Grow More Food Campaign' and the 'Free Fertilizer Trials' launched from time to time have not made any significant impact on rice yields when compared to other cereals such as wheat, jowar, maize and bajra.

It therefore is high time for reviewing the paddy production programme that is recommended and actually practised by the farmers to identify the yield barriers of paddy at the village/farm level. The theoretical constraints to achieving higher yield rates are many—physical, economic, technological, operational, social and various special problems—which need to be identified and measured for a given rice growing tract at micro level to suggest some remedial measures.

Balaghat district in Madhya Pradesh represents the rice bowl of the state where 57 per cent of the gross cultivated area is devoted to paddy crop alone. The average yield of paddy during the last five years in the district was around nine quintals per hectare, against 45 quintals obtained by scientific cultivation and good management of the crop. The glaring difference between the yields obtained through scientific management and traditional practices has been probed in this article in terms of the constraints and the factors associated with them. If the constraints are not properly identified and minimised, the spread of prospective technology for paddy production would be hampered. It may be pointed out that only those factors have been explored which are manageable by the farmers. Natural factors such as rainfall, temperature, rainy and cloudly days, etc, have been left out, assuming that they are given for a region over a long period of time. The differential level of crop management influencing yield levels has been hypothesised that the poor yields are associated with low level of investment which may be regarded as a proxi variable for management.

undulating topography

Balaghat district is situated in the southern part of Madhya Pradesh. It comprises three tehsils (Waraseoni, Balaghat and Baiher) and ten development blocks. The topography of the district is very undulating—full of rivers, streams, flat topped forest hills and ranges with enclosed patches of yellow, red and black soils. On an average, the district receives 1503 mm of rainfall with maximum precipitation during July and August. April and May are the hottest months of the year while December and January are the coldest. Nearly 27 per cent of the total geographical area of the district is cultivated, out of which 42 per cent is irrigated. Paddy dominates in the cropping pattern followed by linseed and wheat. (For resource position, please refer to Appendix).

The Waraseoni and Lalbarra blocks of the district and five villages from each block were selected on the basis of the area under paddy. Five farmers from each selected village were randomly picked up for the purpose of investigation so as to have 50 farmers as the primary sample units. Three paddy plots: good, average and poor (in view of the crop stand and yield levels)* were selected from each farm for the purpose of investigating the constraints. The farmers' judgement on the plot categories during the kharif 1977-78 was considered to be reliable since it was based on their long experience and was convenient for them to spell out the reasons for the particular condition of paddy crop and the corresponding yield levels.

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*Crop Production Year Book, FAO, 1963, p 30,

testing the hypothesis

The hypothesis on the association of crop yield with the level of investment (management) was tested through the correlation coefficient. The yield gaps between the paddy yield from the selected plots and the yield targetted for package of practices were considered during the process of specification of yield constraint for different durations of paddy varieties (early, medium and late) and their trade qualities (coarse and fine). Inputs and outputs were priced at the prevailing rates during the investigations.†

Trend (Area, Production and yield): The analysis of the secondary data (1964-65—1974-75) on area, production and yield of paddy in the district revealed that the yield rates were not only low but also highly unstable. A declining trend of yield in the district is a matter of serious consideration. The acreage variability was found to be less than 10 per cent but yield and production variabilities were around 30 per cent (Table-1)

Thus, poor yields with greater variability is the phenomenon of paddy cultivation in the Balaghat district which is a great challenge to the scientists, farmers and the government.

Traditional Vs. High Yielding Varieties (HYVs): The average area under paddy crop among the sample farms was 6.40 hectares, out of which only 1.048 hectares (16.37%) was under high-yielding varieties. This dominance of traditional varieties is itself a matter of investigation when nearly 88 per cent of the paddy area on sample farms was irrigated. It was also observed during the investigation that there were no early fine local varieties and medium-fine HYVs, (Table II). Breeding work to evolve such varieties is urgently called for with a view to introducing double cropping in this area. The acreage distribution of HYVs revealed that Garima ranked first followed by Ratna, Pusa, Jaya, C.R-42, IR-20 Sona, Kavery, Kranti, Sabarmati, Padma, Lallu and TN-1. Although popular HYVs of paddy were coarse, but due to their better yield performance farmers devoted some area to them. Medium and late duration local varieties were dominant in respect of their area allocations. Out of 150 plots picked up for constraint analysis, 62 plots had HYVs, while the remaining 88 plots were under local varieties. High-yielding varieties were generally grown on smaller plots as was evident from the fact that 40 per cent of the total plots accounted only for 16 per cent of the area under paddy on sample holding.

TABLE I

Area, Production and Yield of Paddy in Balaghat District, MP

(1964-65 to 1974-75)

Years	Area (000 'ha)	Production (000 tonnes)	Yield (kg/ha)
1964-65	234	222	980
1965-66	188	97	544
1966 67	211	98	491
1967-68	213	197	972
1968-69	277	188	910
1969-70	219	221	1060
1970-71	221	237	1130
1971-72	222	265	1163
1972-73	223	137	608
1973-74	224	197	897
1974-75	222	110	523
Average	223	183	862
Trend (slope)	0.745	+1.36	—0.36
@Variability (C.V).	9.39	32	29

Note: Coefficient of variation (CV)

Source : MP Agricultural Statistics, Director of Agriculture MP 1975-76.

Investment and yield levels: The yield levels of various paddy varieties, as shown in Table III, varied widely depending upon the quantum of investment and intensity of crop management. The investment used as a proxi for management was directly associated with the levels of crop yield. The frequency of poorly managed plots with consequent poor yields was as high as 55 per cent of the total plots (150) included in the sample followed by plots representing average (27 per cent) and poor yields (18 per cent). Poor yields were reckoned at 16.71 qtls/ha and 15.16 qtls/ha for HYVs and local varieties, respectively. The levels of good yields ranged from 26.50 qtls/ha in case of local varieties to 34.44 qtls/ha for HYVs. The targeted yields for recommended package of practices were 40 qtls/ha for HYVs and 30 qtls/ha for traditional varieties. Although high yielding varieties performed much better than their local counterparts, they involved greater financial commitments and better crop management. Thus, if the capital is a constraint, the farmers may grow local varieties which give nearly the same yield as obtained for poorly managed HYVs involving larger investments.

pattern of investment

The total investment in terms of variable costs of paddy production when allocated to crucial inputs and other items gave an indication that it is the pattern of investment which matters in the yield performance than the total investment itself. The crucial inputs refer to better seed, chemical fertilisers, plant protection materials and irrigation (if needed and given). In the case of HYVs the farmers spent Rs 750, Rs 640 and Rs 315 per hectare on crucial inputs for achieving good, average and poor yields, as against Rs 620, Rs 475 and Rs 305 per hectare on traditional varieties, respectively. It may be recalled that the levels of management were earmarked by the farmers themselves depending upon the size of investment, crop stand and yields obtained on individual plots. The highly significant correlation coefficient between the investments and yield levels (0.72) suggests the acceptance of the hypothesis that yields are associated with the levels of investment.

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*Yield expectations based on the past experience.

†Coarse varieties @Rs 80 per qtls, Five varieties. @Rs 85 per qtls :
Nitrogen (N) @Rs 4.50 per kg.
Phosphate (P) @Rs 4.00 per kg.
Potash (K) @Rs 2.00 per kg.

Yield and Investment Gaps : Yield gaps were synonymous to investment gaps for varying levels of crop management (good, average, poor and package of practices). Yield gaps were highest between the yield rates obtained through recommended package of practices and poorly managed crops irrespective of paddy varieties. The same was true for investment gaps as shown in Table IV. The yield gaps ranged from 8.5 qtls/ha to 23 qtls/ha in HYVs and from 7 qtls/ha to 15 qtls/ha in local varieties. Investment gaps were much wider in magnitude for HYVs as compared to local varieties which support the disinclination of farmers to adopt HYVs on a large scale. The investment gaps explaining the yield gaps ranged from Rs 365 to Rs 996 per hectare in the case of HYVs as against Rs 131 to Rs 809 per hectare in the case of local varieties. The larger the investment gap, wider the yield gap irrespective of the varieties grown under different levels of crop management.

The investment gaps and the consequent yield gaps presented in Table IV further give a clue to rationalise the use of funds on crucial inputs for bridging the yield gaps. The opportunity cost of bridging yield gap through crucial inputs per quintal in the case of traditional varieties was much higher (Rs 28.35) than that of HYVs (Rs 18.49). The investment constraints in terms of crucial inputs seemed to be more damaging on HYVs than on local ones for reasons of the differences in genetic potentials of yield and their response to varying levels of crucial inputs.

TABLE II

Duration and Quality-wise Distribution of Paddy Varieties Grown on Sample Holdings in Balaghat District, MP—1977-78

Duration	Trade qualities	Varieties Grown and Acreage Ranks	
		HYV	Local
Early	Coarse	CR-42, (5) Padama, (11) Pusa (3)	Uraihutta, (6) Ludka (15) Salo, (17) Pandri, (18) Chipda, (19)
	Fine	Lallu, (12) Kaveri, (8) TN-1 (13)	———Nil———
Medium	Coarse	Ratna, (2) Kranti (9)	Baka, (10) Barma, (11) Cross, (20)
	Fine	———Nil———	Parmal, (8) Aanjan (12) Cross Ajyalne, (13) Datfari (9)
Late	Coarse	Garima, (1) Jaya, (4) Sona (7)	Safri, (3) Masuri (14) Piso, (6) Benisar (4)
	Fine	Sabarmati, (10) IR-20 (6)	Luchai, (1) Chinnori (2) Baspatri, (7) Dubraj, (3)

*(Figures in brackets indicates the ranks with respect to area under each variety).

production constraints

The adversity of nature and the perversity of the farmers need not be given too much emphasis after nearly three decades of development efforts in the country. It is now time to strike at those operational constraints which can be minimised by the joint efforts of the farmers and the government. Therefore, some general and specific constraints observed and reported by the farmers are discussed below:

Paucity of the Desired Strains: The non-availability of well-defined good quality seed at the village level was the general constraint reported by the respondents. The paddy strains representing high yields, medium duration and fine trade qualities were the mouth words of the farmers in terms of their pressing demand. Similarly, early maturing fine strains of local varieties are also non-existent. Suitable varieties need to be evolved, multiplied and distributed to farmers for achieving higher yields and introducing double cropping in the district.

Non-adoption of HYV : Capital intensiveness of HYVs, non-availability of seeds and other complementary crucial inputs (fertilisers and plant protection materials) were the major reasons associated with the non-adoption of HYVs. Farmers reported their acquaintance with the technical know-how of paddy cultivation. But apart from financial and input supply constraints, they still had special liking for the traditional varieties grown for home consumption. The preference for fine varieties of paddy is likely to increase further. The demand with the successive rise in the level of farm income for better quality rice seems to be relatively income elastic and the breeding policy for paddy should be quality oriented specially in case of early and medium duration strains.

Low Fertility Status of Soil : The

TABLE III

Yield Levels and the Size of Investment on Paddy Crop in Balaghat District, MP : 1977-78

Paddy varieties	Good management (27)			Average management (40)			Poor management (83)		
	Yield qt/ha	Total investment Rs/ha	On crucial inputs Rs/ha	Yield qt/ha	Total investment Rs/ha	On crucial inputs Rs/ha	Yield qt/ha	Total investment Rs/ha	On crucial inputs Rs/ha
A. H.Y.V. (62)									
a. Early coarse (9)	45.00	1452	800	28.7	985	680	16.30	855	300
b. Early fine (10)	—	—	—	—	—	—	13.80	836	285
c. Medium coarse (14)	30.87	1277	730	25.0	929	575	19.37	880	360
d. Late coarse (25)	34.70	1310	780	25.0	917	600	17.50	873	320
e. Late fine (8)	27.20	1196	690	25.0	954	705	16.60	588	310
Average	34.44	1311	750	25.92	946.25	640	16.71	864.40	315
Cost (Rs per qtl)—	—	38.06	21.78	—	36.51	24.69	—	51.73	18.85
E. LOCAL (88)									
a. Early coarse (8)	27.50	943	650	20.00	853	450	14.40	725	275
b. Medium coarse (10)	25.60	933	540	20.00	802	415	—	—	—
c. Medium fine (24)	25.70	1131	640	17.00	955	470	14.43	750	280
d. Late coarse (18)	30.30	1160	670	18.40	960	500	16.70	810	335
e. Late fine (28)	25.40	1080	600	21.20	1018	540	15.12	785	330
Avearge	26.50	1049.40	620	19.32	911.60	475	15.16	767.50	305
Cost (Rs per qtl)	—	39.60	23.40	—	47.49	24.58	—	50.62	20.12

Note: Figures in brackets indicate the number of plots in each category. *Variable costs only. The package of practices for local and HYVs of paddy involved an investment of Rs 1576 and Rs 1860 per hectare for anticipated yield levels of 30 qtl/ha and 40 qtl/ha respectively.

TABLE IV

Investment and Yield Gaps Among Levels of Crop Management for Paddy Varieties in Balaghat District, MP: 1977-78

Between levels of crop management	Gaps in HYV			Gaps in local varieties		
	Yield qtl/ha	Investment Rs/ha		Yield qtl/ha	Investment Rs/ha	
		Total	On crucial inputs		Total	On crucial inputs
a. Good & average	8.52	365	110	7.18	131	145
b. Good & poor	17.73	447	435	11.34	282	305
c. Package & good	5.56	549	130	3.50	527	146
d. Package & average	14.03	914	240	10.68	658	291
c. Package & poor	23.29	996	565	14.84	809	461
Average	13.84	654.20	256	9.51	481.40	269.60
***Rs/Qtl of yield gap—**	—	47.29	18.49	—	50.62	28.35

*Opportunity Cost of bridging yield gap in Rs/Qtl.

fertility status of the paddy fields of the sample farms was reported to be very low and out of 150 plots, 83 plots were claimed to have poor soils. The fertility status, although not determined by chemical analysis of soils, was established by the general observation of the farmers, crop stand and paddy yields. The study could not estimate the degree of the low fertility of soils but uncovered the nature of the soil problems for reasons of monocrop rotation and non-application of organic and chemical fertilisers. Undulated topography of 23 plots also represented poor soils, poor water management and poor yields.

Non-existence of Input Supply Lines: The sample village did not have seed, fertiliser and insecticide stores which form a general constraint of better crop husbandry and higher yield rates. Lack of market intelligence, however, was not reported as the constraint for adoption of new crop production technology.

supply of inputs

The only remedial measure that needs to be applied is timely and adequate supply of purchased inputs (seed, fertilisers, plant protection materials) at village site at the time of disbursing the crop loans. The investment gaps automatically create management deficiencies in scientific production of crop leading to wider yield gaps.

Specific Constraints: The specific yield barriers of paddy crop reported by the respondents for good, average and poor management and yield levels are summarised in Table V.

It may be observed from Table V that the specific constraints of paddy production varied in intensity with the levels of crop management and yield rates. It may be recalled that the analysis included 50 plots for each level of crop yield, i.e. good, average and poor. The frequency of constraints falling under each category of crop management was counted and ranked. Contrary to expectations, plots representing good management and yield level were reported to have low fertility status of the soil as constraint number one. Under good management, the fertility consciousness and the consequent application of larger doses of fertilisers have given higher yields. In other words, farmers felt the need and probability of raising and maintaining the fertility of these plots for which they were rewarded with higher outturns. Substandard seeds was ranked as the first constraint on plots representing average management while the inferior seeds was recognised as the seventh constraint in order in case of good management.

The plots representing poor management of crop and yield ranked undulated topography as the basic constraint of paddy production. This divergence in the ranks of the reported constraints leads to the conclusion that the constraints are linked up with the specific field situation, farmer's own experience on yield expectations from each plot and the level of investment committed or omitted. The seed constraints when further analysed revealed that the plots receiving average and poor management were planted with own farm seed which did not conform to the standards of scientific cultivation. Good management for achieving the higher yields started with the approved seed varieties recommended by the agriculture department. Late transplanting did not prove to be a constraint under good management while it was reported for plots representing average and poor crop yields. The delayed transplanting was mainly due to delays in preparing seedlings and non-availability of transplanting labour in time. The influence of plant populations on yield level could not be identified as several plots were planted with the seedlings from a common nursery. However, in the case of traditional varieties, farmers advocated larger plant population to get higher yields.

Application of chemical fertilizers proved to be pivotal in adoption of improved methods of paddy cultivation. The adopters of HYVs were the users of chemical fertilizers on traditional varieties. Innovators of HYVs became receptive to improved methods of paddy cultivations although they failed to practice the package recommendations either due to financial constraints or for want of input supplies at the village level. Moreover, farmers did not know the titbits of fertilizer technology itself. Arbitrary reduction of fertilizer doses and imbalances in nutrient combination appear-

TABLE V

Constraints of Paddy Production under Varying Levels of Crop Management in Balaghat District, MP, 1978-78

S No	Constraints	Levels of management and crop yield					
		Good		Average		Poor	
		Frequency	Rank	Frequency	Rank	Frequency	Rank
1.	Low soil fertility	23	1	9	2	8	5
2.	Non-use of fertilisers	18	2	5	4	10	3
3.	Non-availability of FYM	7	5	4	5	4	6
4.	Non-avilability of irrigation	11	3	—	—	12	2
5.	Poor water management	10	4	3	6	9	4
6.	Substandard seed	2	7	13	1	3	7
7.	Undulated topography of fields	5	6	5	4	13	1
8.	Non-availability of plant protection	—	—	7	3	12	2
9.	Delayed transplanting	—	—	2	7	9	4
10.	Ignorance of technical knowhow	—	—	1	8	2	8

ed to be the serious lacunae in the adoption of fertilizer technology. The fertilizer doses ranged from one-fifth to three-fourths of the recommended doses for want of funds, non-availability of adequate quantity of fertilizers and risk attitudes. A few cases, no doubt, were also observed where the actual fertilizer use exceeded the recommended doses. This leads to wastage of scarce resources like funds and fertilizers. Complimentarity in nitrogen and phosphate nutrients for paddy production is mostly disregarded by the farmers. The N:P ratio varied from 1.8:1 to 10:1 as against an ideal ratio of 2:1 for soils of average fertility. The ratio widened with the degradation of crop management from good to average and from average to poor. About 90 per cent of the plots representing poor yields were served by nitrogenous fertilizers (Ammonium sulphate, or urea) only. The N:P ratio for average yield ranged from 1:5:1 to 5:1. The imbalances in fertilizer use in the opinion of the respondents could easily be minimised if the balanced fertilizer-mixtures for paddy crop are supplied in time at a reasonable distance and price. Unfortunately, soil testing although known to farmers using fertilizers was not reported at all for want of facilities and its scientific procedures. Rapid soil testing kits need to be provided at village level to analyse soils and formulate definite fertilizer recommendations for individual field and variety of crops.

plant protection

As regards the plant protection measures, the farmers still depend upon wait and see policy and do not plan in advance to fight out unforseen infestation of insects, pests and diseases. Only well-to-do farmers, who are in close contact with the extension agency, are able to manage the plant protection materials. Poor farmers simply lament for their damaged crops in the name of bad luck or the nature's will. None of the sample farmers owned plant protection equipments and the required chemicals. Weeds emerging in paddy fields were mechanically controlled and use of herbicides was still not regarded as a infeasible innovation.

The Balaghat district is known for paddy cultivation which has as high a yield potential as 45 qtl/ha. The yield rates in the district were found to have a declining trend during the past decade. The yields are not only low but also highly unstable. The yield gaps between the traditional and improved methods of cultivation were around 10 to 20 qtls/ha. Yield gaps were much wider in HYVs than in the case of traditional varieties.

Traditional varieties dominated (83 per cent) over the HYVs in coverage. A number of general and specific contraints have been reported by the sample farmers. The general contraints were low fertility status of the soils, lack of input supplies and non-adoption of HYVs. The specific contraints were undulated topography of fields, poor quality seeds, non existence of early fine local and medium fine HYVs of paddy, non-availability of crucial inputs at village level and misconceived fertilizer technology adopted by the farmers.

wait and see policy

The idea of plant protection still rests on 'wait and see' policy and the farmers let the crop be damaged at nature's will. Fertilizer application has 'linkage effect' on building confidence and adoption of improved methods of paddy cultivation. Rapid soil testing facilities, input supplies and plant protection measures are the remedial measures that need to be provided at village level for enhancing paddy yields. The genetic manipulations of paddy varieties need to be quality oriented along with shortening of duration and higher yield potentials to minimise the constraints imposed by the market forces.

Community nurseries of recommended varieties need to be encouraged for avoiding delays in transplanting and pushing yield rates. The investment gaps were synonymous to management gaps leading to spectacular yield gaps. The man-made constraints of paddy production in the districts pose serious problems. The results are applicable to specific locations covered in this study since the constraints are linked up with the specific situations. The capital constraints were more rigorous on HYVs which suggested that in the absence of adequate working capital, local varieties may be considered. Investment on crucial inputs (seed, fertilizers, plant protection) was the determinant of yield rates rather than the total investment per unit of area. The tendency of risk aversion among paddy growers of the Balaghat district suggests that there would be little need and little demand for crop insurance. The smallness of fertilizer doses and investment on crucial inputs may also be attributed to the risk attitudes of the respondents.

APPENDIX

Ranking of Balaghat District in MP According to Different Indicators of Agricultural Development (Resource Base)

S. No.	Indicators	Rank of Balaghat District in 43 districts of MP
1.	Annual rainfall	9
2.	C V rainfall	18
3.	Soil Fertility Index	2
4.	Per capita net area sown	45
5.	% of net irrigated area	1
6.	% of double cropped area	1
7.	Composite index of agricultural resource banks	1
8.	% of area under HYV	1
9.	Fertilizer use kg/ha.	15
10.	% of Area under plant protection programme	30
11.	Composite index of adoption of new technology	14
12.	Cooperative credit advanced per cultivator	20
13.	Number of rural commercial banks	6
14.	Rural electrification	26
15.	Composite index of agril. infrastructure	2
16.	Overall composite index of agril. development	2

Source: Inter District Comparsion of Agricultural Development in MP, Ad hoc Study 35, 1977. Agro-Economic Research Centre for MP., Pp. 88-99.

Civil engineering market in west Asia

B. Bhattacharyya

There has been a decline in the expansion of construction business in west Asia as many smaller countries have virtually completed their infra-structure projects. In some countries inflow is exceeding the outflow. There are also problems of immigrant labour to tackle. To that extent securing contracts has become tougher for Indian firms, particularly in the face of South Korean and Yugoslav competitors. These problems were discussed in a paper submitted to a seminar jointly organised by the Institute of Foreign Trade and the Overseas Construction Council at Bombay recently. As the paper is of general interest, it is being reproduced below.

THE CONSTRUCTION market in west Asia, though still quite large, is not expanding at the same speed as it had been in the early 1970's. Table I presents some data on the construction expenditure in selected West Asian countries. It is found that compared to 1977, total expenditure in 1978 declined by four per cent. The only countries where expenditures were higher in 1978 were Saudi Arabia, Kuwait, Jordan and Iraq. The overall decline of four per cent in fact is very much an under-estimate if the inflation factor is taken into account.

The projections (Table II) made for Saudi Arabia and the five Gulf states for 1981 show the same trend. Saudi Arabian expenditure in 1981, valued at 1977 prices, is estimated to be 14 per cent lower compared to the 1978 level while for the Gulf states, the decline is as high as 31 per cent. These figures obviously indicate that the competition in the Arab construction market is going to be much more severe in the coming years.

reasons for decline

The reasons behind this anticipated decline are: first, many of the smaller countries in the Gulf have virtually completed the basic infrastructure projects. Second, some of the countries found that the inflow of revenue is exceeding the outflow. And third, for some smaller countries the problem of immigrated labour has become so acute that the governments thought it prudent to reduce the scale of construction activities.

Another aspect which has to be taken into account while evaluating the prospects of the Arab construction market is that the demand structure of projects is changing. Since the basic infrastructure projects have either been completed or contracts have been mostly awarded, demand, from now onwards, will increasingly be for more sophisticated high technology projects. Such large projects also have substantial civil engineering component. But for getting a slice of this very large potential market segment a different marketing strategy is called for.

Since the market is not expanding uniformly, it is necessary to identify the areas where basic infrastructure spending will still continue to be large. Saudi Arabia is in any case the largest market in this region. But there too the spending on infrastructure is being reduced. In the budget for 1979-80, the provision for infrastructure is 18.5 million SR compared to 40.8 million SR in 1978-79. But still, together with transport and communications, it accounts for 25 per cent of the total budget.

Libya is another market which is still

TABLE I

Construction Market in Selected Countries

(Value $ million)

Country	1977	1978	% Change over 1977
Bahrain	320	259	—19
Egypt	1713	1182	—31
Iran	5305	3873	—27
Iraq	2750	3355	22
Jordan	320	422	32
Kuwait	1020	1071	5
Libya	1433	1247	—13
Oman	483	382	—21
Qatar	461	309	—33
Saudi Arabia	10390	11845	14
Syria	630	523	—17
UAE	1960	1235	—37
Total	26785	25703	—4

TABLE II

Actual and Estimated Construction Expenditures in Saudi Arabia and the Gulf States

(In US$ million—at 1977 prices)

	Saudi Arabia		Five Arab Gulf States	
	1977	1981	1977	1981
Public and private construction expenditure	10390	8950	4243	2922
Total annual construction equipment market	1198	1368	710	552

Source : Plantecon Overseas (Research), reproduced in *Financial Times*, January 22, 1979.

booming. It has signed $2,200 million worth of contracts during April-May, 1979, out of which India's share is $66 million. Most of these contracts are for roads, railways, airports and telecommunications. The communication contracts along with the contracts for the purchase of related equipment amount to $1,100 million. It is expected that bulk of the spending in the next few years will be on agriculture viz., land reclamation, water desalination and dam construction. Yugoslavia has done extremely well in the Libyan market and it is reported that a basic reason behind this success had been the very competitive bids offered by Yugoslavia.

So far as the basic infrastructure projects are concerned, countries like Egypt, Sudan, north and south Yemen and Iraq will provide the market in the years to come. These countries do not have as much resources as the petro-countries, but still have enough to finance basic infrastructure projects like roads, housing, sewerage, etc., for which there is acute scarcity in those countries.

package of services

Competition in the construction and equipment market for Indian firms comes primarily from giant corporations, be they from west Europe, Yugoslavia or South Korea. The basic advantage of such corporations which will be even more effective in future, is that they are in a position to offer a complete package of services. These companies are well aware of the benefits that the tenderer can derive out of such composite offers. And, therefore, even when individually they are not in a position to offer the complete package, they form a consortium. As earlier mentioned, with the increasing sophistication of the new projects this trend towards consortium is going to be stronger.

In such a situation it will be necessary for the Indian companies to develop new marketing strategies. South Korean construction companies which have successfully outbid western firms in west Asia in simpler type of projects are precisely doing that. The primary factor behind the South Korean success has been the low labour cost coupled with high labour productivity. But they are relatively weak in high technology areas. It is reported that the "Korean Overseas Construction Corporation which represents the Korean industry has set up an office in London to look for European joint venture partners for more complex projects. Hyundai is already involved in providing the labour element in a consortium lead by Kraftwerk Union bidding for the Al-Khobar II desalination plan." (*Financial Times*, January 22, 1979.)

cost disadvantage

British consultancy firms are leaders in civil engineering works. But British civil engineering contracts are not doing that well in this market. This might have been due to cost disadvantage. Since British consultancy does not in most cases result in the contracts going to British firms, there is presumably a scope for our civil engineering firms to join hands with British consulting organisations. But in the field of consultancy services, there is a very recent trend in Saudi Arabia to favour firms with local partners. The problem is that there are not enough good Saudi consultants available to have as partners. A particular instance in this field may be of interest in the context of developing the marketing strategy. One Saudi consulting firm, Abalkhail Consulting Engineers, has opened an office in Dubai where, with locally available expertise, it is doing drawing and research for Saudi projects (*Meed*, March 13, 1979). Whether such collaboration can be attempted between our consulting firms and Saudi Arabian consultancy firms is something which may be pondered upon.

The management of tender operations has also become more scientific and, therefore, the bidders will have to be much more careful in preparing their quotations. In many cases, specially for large contracts, the concerned governments are asking established foreign companies to handle the tender operations. This has introduced a new element because very stringent adherence to tender conditions are now expected..

It is also becoming increasingly a practice, especially in Saudi Arabia, to hold on to the bid bonds of the best two or three bidders and subsequently negotiate with each bidder to scale down the bid. In such cases while preparing quotations, it would be necessary to take into account this aspect. The sudden cash flow problem which many construction firms had to face in 1978 due to the Saudi Arabian new decision for financial approval for project expenditure had highlighted an additional hazard of international contracting business. The necessity to arrange for overdrafts at exorbitant rates of interest in a foreign land imposed a crushing burden on the profitability of a company's operations. Moreover, this is a contingency which cannot be covered through any institutional mechanism. Of course, late payment is a way of life in many countries and while preparing quotations, it is customary for many firms to inflate the bid correspondingly to take care of this fact. But, in future, it may be necessary to consider even the contingencies of 1978 type.

The overall figures indicate that though the average profitability in construction is still quite high, the rate is becoming lower during the last two years. This has been the effect of both intense competition and better tender management by the tender floating organisations. This is also an important aspect to be considered for future operations in these markets.

priority order

Previously, having an able agent went quite far towards success in tender business. But in future this may no longer be so effective. There is a general trend to favour local firms for the award of construction works. It is becoming an increasing practice to break up large civil engineering contracts into smaller ones so as to make it possible for the Arab companies to bid. *Meed* reports that the "Royal Commission for Jubail and Yanbu has a definite priority order for suppliers and contracts: first is a 100 per cent Saudi company manufacturing in the kindgdom; second a majority Saudi company manufacturing in the kingdom; third a minority Saudi company manufacturing in the kingdom; fourth a majority Saudi company manufacturing overseas; fifth a minority Saudi firm doing likewise, and sixth a foreign company manufacturing overseas. A preference of 10-15 per cent is given to those in the first category." (*Meed*, Special Report, June 1979). It may be quite on the cards that joint venture companies will prove to be more successful in this business in future. However, it must be pointed out that having a joint venture is not necessarily the key to success. In fact, joint ventures of quite a few large firms from the west have collapsed in the last two years. Only those joint ventures have succeeded where the foreign partners had already established their credibility and joint ventures were started essentially to accede to local aspirations.

Most companies are generally worried about the financial implications of performance guarantee. Since for a large project, the amount of performance guarantee is substantial, the burden on the company, if the guarantee is invoked by the buyer, will be very high. In fact, most of the problems associated with performance bond are hypothetical: calling of bonds arbitrarily, having open-ended liability in cases of bonds having no specific expiry date or threatening to extend the expiry date. Experience so far does not generally indicate any reason for extraordinary concern but it does not mean proper care should not be taken while analysing the contractual provisions.

Some suggestions in the context of legal problems are given in a *Meed* issue. Some of these are:

"Delayed payments are usually the result of a slip-up in paper work or badly-worded contract. If final payment requires a certificate of satisfactory completion of work, you could have a problem, it might be difficult to get all the representatives to sign the certificate. The secret is to write an agreement so that your payment goes ahead on a negative response from the client.

"Do not write a contract guaranteeing the number of people you will have on site at a given time. Manning schedules should be a statement of your intention only.

"Be aware that a contract often starts from the date of the letter of intent, not the date the contract is signed."

Another legal issue which is generally commented upon relates to arbitration. There are essentially two legal points: first, generally outside arbitration is not acceptable to the buyer and second, and more important, since in the legal system of certain countries, arbitration is not provided in the Islamic law; the arbitration clause is a contract between the parties which is legal but not binding. This means that if either party does not participate in the arbitration proceedings, it cannot be made to do so. These are typical issues which may or may not create problems in future. The only point is that it is better to consider them at the outset and try to safeguard own interest to the extent possible.

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Rayon & T.P. Sections	Tribeni, Dist : Hooghly.
Spun Pipe Section	Bansberia, Dist : Hooghly.
Cement Section	Basantnagar, Dist : Karimnagar (A.P.)
Refractory Section	Kulti, Dist : Burdwan.

TRADE WINDS

Paper Mill for Nigeria

BIRLA BROTHERS Private Ltd have been awarded by the federal government of Nigeria a prestigious contract for providing know-how and technical services for the operation of an integrated pulp and fine paper mill with a capacity of 60,000 tonnes per annum of fine and cultural papers and 100,000 tonnes per annum of air dried bleached pulp. This plant is being established at a cost of over US $250 million. The agreement will be valid for an initial term of five years. This contract was awarded to Birla Brothers after the Nigerian government was fully satisfied about their capability to establish and operate successfully such a huge paper project outside India.

It may be recalled that Birla Brothers are already providing know-how and technical services for the operation of the paper mill of the federal government of Nigeria at Jebba as also for substantial expansion of its capacity from 40 tonnes of paper per day to 200 tonnes of pulp and paper per day. The award of these successive contracts to Birla Brothers is a measure of the confidence of the federal government of Nigeria in the management and technical expertise of Birla Brothers. These contracts will earn substantial foreign exchange to India as know-how and technical service fees and are valuable contributions of Birla Brothers to the promotion of this non-traditional export.

State Loans

Twentyone state governments have announced the issue of their new loans, bearing interest at 6.5 per cent per annum for amounts totalling Rs 276.75 crores. The amounts of the individual state government loans, redeemable at par after 10-years, on September 1, 1989 are: Andhra Pradesh Rs 21.75 crores, Assam Rs 7.25 crores, Bihar Rs 14.75 crores, Gujarat Rs 20.25 crores, Haryana Rs 9.75 crores, Himachal Pradesh Rs 1.50 crores, Jammu and Kashmir Rs 2.25 crores, Karnataka Rs 17 crores, Kerala Rs 17 crores, Madhya Pradesh Rs 9.50 crores, Maharashtra Rs 29.25 crores, Meghalaya Rs 1.25 crores, Orissa Rs 10 crores, Tamil Nadu Rs 28.25 crores, Uttar Pradesh Rs 38 crores, West Bengal Rs 14.50 crores, Manipur Rs 2 crores, Nagaland Rs 2.75 crores and Tripura Rs 2 crores.

The loans, which will be issued at Rs 100 will open for subscription on September 1 and close on September 3 or earlier without notice, as soon as subscriptions approximate to the amount of each issue are received, according to the Reserve Bankof India. All the state governments reserve their right to retain subscription up to 10 per cent in excess of the notified amounts. Interest on the loans, payable half-yearly on March 1 and September 1 each year, will be liable to tax under the Income-Tax Act, 1961. Interest on government securities, along with interest or dividend on other approved investment, will be exempt from income-tax subject to a limit of Rs 3,000 a year, and subject to other provisions of Section 80 L of the Income Tax Act. The value of investments in these loans, together with the value of other previous investments in government securities and other investments specified in Section 5 of the Wealth Tax Act, 1957 will also be exempt from wealth tax up to Rs 1.5 lakhs.

Subscriptions to these loans may be made in cash or by cheque, while securities of 15 state loans, issued at 5.75 per cent per annum redeemable in 1979, will also be accepted at par for conversion into the new loans of the respective state governments, the RBI communique said. These loans are the Andhra Pradesh state development loan, the Assam loan, the Bihar state development loan, the Madras loan, the Maharashtra state development loan, the Mysore state development loan, the Punjab loan, the Rajasthan state development loan, the Uttar Pradesh state development loan and the West Bengal loan. Interest for the half-year ending August 31 on the securities accepted for conversion will be paid at the rate of 5.75 per cent per annum when the new securities are issued.

Rupee-Rouble Exchange Rate

The exchange rate between the Indian rupee and the Russian rouble has been revised to Rs 9.9974 per rouble with effect from August 11, 1979. The earlier rate was Rs 9.6938 per rouble. The revision is in terms of the protocol signed between the governments of India and the Soviet Union on November 25, 1978, providing for periodical adjustments in the rupee-rouble rate on the basis of changes in the value of the Indian rupee in terms of the multi-currency basket. The revised rate is applicable to the outstanding contract value or payment obligations under government credit agreements and commercial contracts denominated in roubles.

Export Award for Universal Cables

Universal Cables Ltd has again been awarded the certificate for export excellence from the Engineering Export Promotion Council for the year 1977-78. During this period the company's exports totalled Rs 277 lakhs.

Financial and Economic Indicators

A broad spectrum of financial and socio-economic Indicators, together with the supporting time-series data used for the purpose, is presented in pictorial form (through multi-coloured graphs, charts of different types, etc), in a publication brought out by the Reserve Bank. The graphs and charts depict the long-term trends, the seasonality, the changing patterns of inter-related economic factors and the like. Broadly, the data are presented on the same lines as in the Reserve Bank's publications such as Banking and Monetary Statistics of India and the Statitsical Sratements volume of the Report on Currency and Finance. In several cases, the period covered is from 1950-51 onwards. For a few selected items, the monthly data for recent years have also been given alongside the annual data.

Graphs showing seasonal factors have been presented for important series like money stock measures, and index numbers of wholesale prices. For enabling a direct reading of growth rates, semi-logarithmic charts on a few selected items have also been included in the volume. Pie charts, presenting a snapshot view at different points of time, bring into focus the structural changes that have taken place over the years. The publication (of over 400 pages) is elegantly brought out on art paper in multi-coloured printing. It is priced at Rs 65 per copy (postage extra). Copies of the publication can be had from the Director (Administration), Economic Department, Reserve Bank of India, Bombay.

Silverware Exports

The government has decided to allow "on merits" the export of manufactures containing 50 per cent or less silver. All cases of pre-control commitments will be decided on merits subject to certain conditions.

The conditions are: (I) Advance payment received through an authorised dealer in foreign exchange covering the full f.o.b. value of the consignment before August 13, 1979: or (II) Where based on firm contracts, irrevocable letter of credit was opened by the foreign buyer and accepted by the Indian banks prior to August 13, 1979, and in which shipping bills were passed and goods cleared by the customs but could not be exported because of this decision.

A public notice, issued on August 13, says the exporters should send their claims in pursuance of this decision to the regional licensing authorities along with documentary evidence within 15 days from the date of this notice. Cognizance will be taken only of cases where these documents have been filed in time and cases in which claims are accepted will be given time up to 15 days to effect shipments. Submission of such evidence shall not, however, confer any right on the person concerned for grant of any export licence or permission to export.

UPASI Annual Conference

The eighty-sixth annual conference of the United Planters' Association of Southern India will be held in Coonoor on Tuesday, September 4, 1979. Mr M.R. Masani will inaugurate the conference. The main conference will be preceded by a scientific conference on September 3. There will be a session in the afternoon of September 3, on internationl commodities situation with their significance to India. when the chairmen of the Tea. Coffee, Rubber and Cardamom boards will address the members. To mark the International Year of the Child, a seminar on "Child Care in Plantations" will be held on September 2. As in the past, a three-day industrial exhibition and the sports competitions will be conducted.

Funds for Shipping

The Indian National Shipowners Association (INSA) has estimated that the shipping industry will need assistance of Rs 265 crores during the next two years to meet its foreign exchange and rupee loan liabilities. INSA has submitted its estimates to the recently constituted high-power committee on the industry.

About a year-and-a-half ago, the association presented a white paper to the central government seeking Rs 350 crores to pull the industry through the depreciation that was then prevailing in the international freight markets. While these markets have picked up recently, assistance is needed by the shipping units to meet their earlier commitments. The government agreed last year to help these units and came out with a package of measures. However very little financial assistance has been provided to the shipping companies so far.

Of the total assistance sought about Rs 135 crores will be required during the current year and another Rs 127 crores in 1980-81. Rs 172 crores will go to meet the foreign exchange liabilities of the companies. This apart, INSA's estimate is that a moratorium on rupee loans and interest payment thereon of Rs 92.12 crores will also be necessary.

Duty Exemption on PVC Resin

The ministry of Finance has extended the customs duty exemption on PVC resins up to March 31, 1980. However, countervailing duty of excise and auxiliary duty (cumulative 47 per cent) will be leviable. This has been done in view of the continued shortage of PVC resins and the need to continue its import.

RBI Ordinance

The central cabinet decided recently to repeal the controversial ordinance relating to the strike of the Reserve Bank employees and to allow another on the impounding of the compulsory deposits for a year to lapse. These ordina-

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nces would have lapsed even otherwise with the prorogation of the monsoon session of parliament.

LIC Investments

The Life Insurance Corporation of India has invested Rs 70 crores in the central government securities during July 1979. The corporation has invested Rs 8.25 crores in the bonds of the state electricity boards—Rs 4.06 crores in UP, Rs 3.19 crores in Bihar and one crore rupees in Punjab. Rs 3.50 crores has been invested in the debentures of land development banks of Punjab.

Other investments of the corporation by way of loans during July include Rs 1.5 crores to Andhra Pradesh as special cyclone relief loan, Rs 1 crore to Tamil Nadu Co-operative Housing Society Ltd and Rs 2 crores to West Bengal State Co-operative Housing Federation Ltd. Loans totalling Rs 2.22 crores have been advanced for urban water supply and sewerage schemes of Haryana and Uttar Pradesh. Six public limited companies in the private sector have also received LIC assistance of Rs 1.4 crores during the period.

Low Interest Rates for Small Consumers

The Bombay District Central Cooperative Bank Ltd has announced 2.5 per cent reduction in its interest rate on loans to small consumers cooperatives up to a limit of Rs 25,000 with effect from July 1, 1979. Mr K. R. Prabhu Desai, chairman of the bank, has told newsmen that the bank, which was charging 11.5 per cent interest on loan up to a limit of Rs 5 lakh, has also reduced its interest rate for medium size consumers cooperatives up to Rs 50,000 from 11½ per cent to 11 per cent.

The cooperatives with credit limits up to Rs 10 lakh will be charged 11½ per cent and cooperatives with limits of over Rs 10 lakh will be charged 12½ per cent interest. During the last year (June 1978 to July 1979) the deposits with the bank have increased to Rs 1,081 lakh from Rs 656 lakh in 1977-78, share capital to Rs 48 lakh from Rs 41 lakh, membership to 1,230 from 914 and the credit disbursed to Rs 327 lakh from Rs 209 lakh.

Vacuum Degassing Plant at Rourkela

Utkal Machinery Limited (UTMAL) has secured an order, in association with Vacemetal (UK) Limited, for both the units of the vacuum degassing plant being set up at Rourkela steel plant for the silicon steel project. The units are designed to degas 66-tonne steel ladles—the largest in India—in one hour.

The silicon steel project at Rourkela, when completed, will produce 37,500 tonnes per annum of cold rolled grain-oriented (CRGO) and 36,000 tonnes per annum of cold rolled non-oriented (CRNO) silicon steels. Both the grades are used for various sheet steel applications for manufacture of transformers, motors, generators and other electrical equipment.

The cold rolled grain-oriented grade of steel will be produced by treating steel from oxygen converters through a combination of oxygen refining and steam degassing processes carried under vacuum. The final analysis calls for simultaneously very low carbon and low manganese, besides low hydrogen and other dissolved gases. The process route for achieving the stringent end analysis, particularly the combination of low carbon and low manganese, has been specially developed by Vacemetal to suit Rourkela's feed steel quality.

The cold rolled non-oriented grade of steel will be produced by refining steel under vacuum utilising at the same time arc heating facilities. The final analysis calls for low carbon, hydrogen and extra low sulphur. This will be the first vacuum arc refining installation in India.

The major part of the hardware, namely, vacuum tanks, covers, cover cars, alloy addition system, ladles and are heating equipment will be indigenously manufactured and procured by UTMAL, whereas the steam ejector system, oxygen lancing, inert gas injection and complete instrumentation and controls will be supplied by Vacemetal.

Airport Project in Yemen

The International Airport Authority of India (IAAI) has been awarded a Rs 22 crore contract to build an airport complex at Riyan in South Yemen. After winning this contract in the face of stiff international competition, the authority now has work worth over Rs 100 crores in hand in four countries. The authority is already building the Ghat and Brak airports in Libya, and two others in the Maldives and Tanzania. This was announced recently by the minister for Tourism and Civil Aviation, Mr Mohammed Shafi Qureshi.

Mr Qureshi also revealed that the latest increase of 74

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paise per litre of aviation turbine fuel would necessitate a corresponding increase in domestic air fares. Indian Airlines' fuel bill is expected to go up by about Rs 20 crores a year to Rs 62 crores. The government has under consideration an Indian Airlines proposal to raise fares by 15 per cent. Indian Airlines has not raised its fares since February 1974, inspite of frequent increases in fuel costs. Air India has in the same period increased its fares by 75 per cent as have other international carriers. Air India's new fare structure too comes into effect from September 1 this year, and fares will go up by 15 per cent on the India-Europe routes, 12 per cent on the India-Japan route and about 10 per cent on the trans-Atlantic route.

BHEL Unit in Tripoli

Bharat Heavy Electricals Limited (BHEL) have achieved another important landmark when its first 120 MW boiler, at Tripoli west power station at Libya, was successfully fired. The is the part of Rs 100 crores turnkey project being executed in Libya by BHEL for 2×120 megawatts thermal power station. The Libyan contract taken by BHEL against stiff international competition, is the biggest single engineering export order secured by India abroad. The scope of work covers project engineering, manufacture of equipment, erection at site, commissioning of the power station, and operating and maintaining it for a period of four years. BHEL has also undertaken the responsibility of training the Libyan personnelfor operating and maintaining the power station.

The Tripoli west power station at Libya comprises of five sets of 65 MW each supplied by a French firm. BHEL contract contemplates extension of the existing power station to increase its installed capacity to 565 megawatts. When the extension project is completed by BHEL, the Tripoli west power station will be one of the biggest power station in North Africa. The foundation stone for the project was laid by Col. Muammar Al-Gaddafi in 1976. A work force of about 2000 Indian workers and technicians is employed at the power station site in Libya.

Cathay Pacific

Cathay Pacific Airways' first extended range Boeing 747-200B jetliner arrived in Hong Kong recently on its delivery flight from Seattle. The aircraft was met at Kai Tak airport by the Governor of Hong Kong, Sir Murray Maclehose, and leading industry and government officials, as well as the chairman of Cathay Pacific, Mr J.H. Bremridge. On board the aircraft was the airline's deputy chairman and chief executive, Mr Duncan Bluck.

Steel Plant for Hungary

Kobe Steel, Ltd. of Japan announced that NIKEX, or Hungarian trading company for products of heavy industry, has awarded the Japanese company an approximately yen 3,000 million contract to build a steelmaking plant for the state-owned Lenin Metallurgical Works, Miskolc-Diosgor, 180 kilometers north-east-by-east of the capital city of Budapest. The projected plant will include an electric arc furnace (220,000 metric tons/year), continuous casting equipment for high quility steel billets (400 000 metric ton/year, 5 strand), and peripheral facilities for waste water treatment, dust collection and such. This is Japan's largest plant deal with Hungary In its five-year plan beginning. in 1981, Hungary plans to modernise its steel industry, increasing its annual production capacity to five million metric tons from the current 3.65 million metric tons in terms of crude steel by scrapping-and-building of facilities, and increasing high qualtty steel production.

India Expo 80 in US

India Expo 1980 a 15-day fair on Indian culture and industrial growth will be held in San Diego, California, in the United States from September, 9 to 21. The Expo managing director and president, Dr, (Miss) Suzanne Hening, told newsmen that it would be the largest fair of its kind in the world to be heldin North America. There would be 200 stalls for Indian businessmen to introduce their products to consumers in North and South America.

In addition to a market for traditional items like handicrafts, textiles, readymade garments, handlooms and spices, there was great scope for silver items, 22 carat jewellery, perfumes, tea, coffee, glassware, leather, and leather products, rubber musical instruments, heavy industrial equipment, machine tools, engineering goods, earth moving equipment, agricultural instruments, transmission. towers and silkfabrics.

Canadian Grant for Rapeseed Oil

Canada will provide India with rapeseed oil worth CDN$15.0 million (Rs 10.5 crores f.o.b.) as a grant during the current financial year. A memorandum of understanding to that effect was signed on August 10, 1979 by the Canadian High Commissioner to India, Mr R.L. Rogers and Dr Man Mohan Singh, secretary to the department of Economic Affairs, ministry of Finance. Under the agreement Canada will also arrange and finance the transportation costs of the rapeseed oil to India, not exceeding 5 million Canadian dollars.

Canada is the only country which has provided outright grants to India for the supply of rapeseed or rapeseed oil since the year 1972-73. Details of the Canadian grant-aid shipments of rapeseed and rapeseed oil to India are given in table below.

(in million Canadian Dollars)

Year	Rapeseed	Rapeseed Oil	Total
1972/73	10.9	——	10.9
1973/74	4.7	9.4	14.1
1974/75	5.4	15.4	20.8
1975/76	—	8.0	8.0
1976/77	—	20.9	20.9
1977/78	—	22.5*	22.5*
1978/79	—	5.1*	5.1*
1979/80	—	20.0*	20.0*
Total	21.0	101.3	122.3

* These figures include transportation costs from Canada to India.

COMPANY AFFAIRS

BB Goes Plural

In his chairman's statement at the annual general meeting of The Britannia Biscuit Company Limited earlier this month, Mr M.M. Sabharwal disclosed that it was proposed to change the name of the company to Britannia Industries Limited. This would, of course, be more than a change in name, for the company is planning to diversify its activities by engaging itself in new operations in addition to the existing business of manufacturing bread and biscuits. A letter of intent was obtained in May 1979 for a project for manufacturing soya-based products and the company is proceeding with the implementation of this scheme, the location selected being in Madhya Pradesh. There are also other plans for the diversification of the company's activities and the chairman has assured the shareholders that the company will continue to explore the potential for growth in other areas so that the value of their investment could continue to grow.

This emphasis on diversification is an obvious and natural consequence of recent government policy attitudes towards the manufacture of bakery products in the large-scale industrial sector. Mr Sabharwal himself sees no difficulty in all-round growth being promoted in the bakery business through the simultaneous progress of both small-scale units and large-scale units. He points out that as it is the entire organised sector produces no more than one-third of the volume of bakery products, which means that there has been enough scope for the growth of small-scale units in this area of food processing. It seems to us too that there will always be a place for the neighbourhood bakery and that what is therefore needed in terms of government policy is to see that the small-scale units have adequate access to basic raw materials such as wheat flour at reasonable prices. Given the easy foodgrains situation in the country, this should not be difficult and therefore for the government there is no reason to be pessimistic about the competitiveness of the decentrailised sector in price and quality vis-a-vis large-scale units.

Jaundiced View

In fact, the government itself is in business in the large-scale sector of the bakery industry and there is therefore no reason why it should look with a jaundiced eye on large-scale private sector units. On the contrary, the public sector undertaking, Modern Bakeries, could do with some healthy competition from rival manufacturers such as Britannia Biscuits so that the consumer gets a fair deal in terms of quality, prices and modern distribution facilities. There is no reason why monopolistic conditions in favour of a public sector undertaking should be encouraged in the bakery industry and Mr Sabharwal's plea for a review of restrictions on the manufacture of bakery products in the organised sector would therefore seem to be a blow struck in the case of consumer protection.

ITC Emphasises its Human Resources

In the latest annual report of ITC Limited, the emphasis is on the corporate philosophy of the company which, it is claimed, is centred in the development of its principal asset, viz, its employees. Currently the company employs over 31,000 people and its wage bill alone has increased from Rs 7.62 crores per annum ten years ago to Rs 22.67 crores in 1978-79. The thrust of the company's corporate philosophy, it is explained, has been as much in the direction of securing a total development of its human resources as in building up professional entrepreneurship in its managers so that the resources of the organisation could be directed towards optimum productivity.

That this approach has paid off is suggested by the physical and financial growth of the company which is now among the leaders of organised industry in our country. Corporate turnover for the financial year ended March 31, 1979, stood at the impressive level of Rs 421 crores marking a gain of Rs 38 crores over the previous year, While the overall profit after tax improved from Rs 4.12 crores to Rs 4.83 crores, the government share of the earnings increased from Rs 234 crores to Rs 269 crores by way of excise and other duties. The dividend has been maintained at 15 per cent on the larger capital base of Rs 22.74 crores (Rs 18.95 crores) as enhanced by the issue of bonus shares during the accounting year.

In the course of diversifying its operations, ITC has been in the hotel industry for a little over three years and the board claims that its aggressive approach in establishing a chain of 12 properties, with three more under construction, has advanced its market status in a short time. Commenting indirectly on the short-lived controversy over the company's agreement with The Sheraton International Incorporated, which was sanctioned by the government on January 27, 1979, the board notes that this is not a collaboration but purely an agreement to obtain marketing and reservation services aimed at developing in the most economic manner foreign business on an incremental basis. The expectation is that, even within the first half of 1979-80, there will be a favourable incremental inflow of foreign exchange after paying for and remitting Sheraton's fees after taxation.

Marine Exports

The company's Foods Division recorded an improvement in the exports of marine products in value terms although there has been no matching growth in quantities. Further advance in this direction would depend on the clarification of the government's policy in respect of deep-sea fishing through trawler operations. The General Exports Division achieved a 35 per cent increase during the year in the value of exports of selected product lines thereby strengthening ITC's status as a major exporter. Indicative of the company's interest in serving the small-scale sector is the decision to add handwoven woollen carpets to its export product range. The overall foreign exchange earnings of the company reached a record level of Rs 39.55 crores including non-traditional exports of Rs 3.68 crores and invisible earnings of Rs 5.14 crores.

Tobacco leaf exports at Rs 28.87 crores were marginally higher than last year and in this connection the board points out that export demand is shifting from tobaccos grown on the traditional black cotton soil in Andhra Pradesh to those in the light soils of Andhra and Karnataka. The inability of the domestic cigarette market to afford these superior tobaccos, due to the crushing burden of excise duties is hindering their development and if India is to be able to face the stiff competition offered by the newly emerging tobacco exporting countries of Asia, Africa and South America, steps should be taken immediately to promote a firm and expanding domestic base without which export capability cannot be maintained or promoted.

Spiralling Cost

Meanwhile, despite rising costs of raw materials and further increase in excise duties in February 1978, the company has been able to achieve a seven per cent growth in volume of its own brands. This, however, calls for maintenance of prices of major brands at considerable sacrifice of profit margins. The operations of the Tobacco Division have consequently emphasised cost cutting through innovative packaging and more effective management generally. There is, however, a limit to cost control in the circumstances of rising raw material prices and wage bill and it is contended that the absence of relief from the crushing impact of excise duties would adversely affect the tobacco farming community and ancillary units dependent on the cigarette industry.

Food Specialities in the Swim

The impact of the "White Revolution" that is going on more or less silently in Haryana and Punjab on the dairy economy of the country has been strikingly illustrated by the bright results of Food Specialities Limited for the year ended December 31, 1978. The turnover amounted to Rs 35.80 crores, an increase of nearly 76 per cent over 1977; exports helped through a 30 per cent growth over the year. Gross profit, exclusive of depreciation, jumped from Rs 20.40 lakhs in 1977 to Rs 2.03 crores in the year under review, while profit after taxation was also sharply higher at Rs 1.40 crores (Rs 64.20 lakhs). The directors' report remarks that increased turnover, improved utilisation of resources, cost efficiencies and higher price realisations enabled the company to regain the profitability levels prevailing in the early 1970s. With sales increasing by 135 per cent between 1974 and 1978 shareholders' funds by 52 per cent and the dividend by 62 per cent the company has established a firm base for a confident future. Even as it is, shareholders have been rewarded by a handsome share in the company's current prosperity. An interim dividend of Rs 1.50 per share was paid in September, 1978 and since then the paid-up equity capital has been increased from Rs 1.85 crores to Rs 2.25 crores in order to bring down the non-resident equity from 69.34 per cent to 40 per cent. A final dividend of rupee one per share has been declared on the increased paid-up equity capital. This compares with the dividend of Rs 2 per share declared for the previous year.

It is interesting to note that the increased availability of liquid milk has enabled the company to raise its output of milk products from 9,550 tonnes in 1977 to 11,390 tonnes in 1978 and realisations from sales of milk products from Rs 13.44 crores to Rs 23.12 crores. Another growth area in the company's operations is coffee and coffee blends the sales of which have gone up from 809 tonnes to 1,348 tonnes and, in value terms, from Rs 5.31 crores to Rs 10.37 crores.

Increased Expenses

The general expenses of the company have increased from Rs 4.58 crores to Rs 9.44 crores. Commenting on this the board has explained that the two figures are not comparable since the company has heavily invested in the year in setting up its own marketing and distribution network. This may account for the expenditure on advertising and sales promotion taking up Rs 89 lakhs in 1978 as against a nil amount in 1977 and the commission of Rs 42.7 lakhs paid to agents as against nil, but it is not immediately obvious why the expenditure on wages and bonus should have gone up as sharply as from Rs 68.34 lakhs to Rs 1.37 crores.

Although the company's finances are in good shape and the scale of its operations has improved very considerably, greater attention to expenditure control may not be a luxury. Meanwhile thanks partly to a balance sheet sporting reserves and surplus of Rs 3.38 crores, the stock exchanges have marked up the shares to Rs 43.50 per share, making it somewhat difficult to recall that even as late as the early months of 1978, Food Specialities were being traded at par.

Tata Oil

Mr J.R.D. Tata, chairman of Tata Oil Mills Company told shareholders at the annual general meeting in Bombay recently that the company's workmen had adopted go-slow tactics for the last two months and they had been on strike since August 9. Except for the Sewri factory in Bombay, which is partially working, two minor factories and some sales offices, all other factories and sales offices are shut down.

Referring to the company's performance in the current year, Mr Tata stated that sales for the first four months (April to July) have been about 25 per cent higher than those of the same period last year, but profit before tax has been barely 3.5 per cen thigher. Profit margins have been squeezed by increases in the cost of raw materials, chemicals and packing materials. The company's performance in the coming months will depend mainly upon the labour situation in the various establishments. If the strike continues- sales will be lower by about Rs 10 crores per month and correspondingly profit will be lower by about Rs 50 lakh per month. Since tax liability will also be lower, decline in profits will be around Rs 20 lakh per month.

According to Mr Tata the management offered to settle matters with the employees through the good offices of the officers concerned or directly with the unit-level union or ultimately by adjudication but the Federation of Employees' Union refused to cooperate in these proceedings.

Calico Debentures

Ahmedabad Manufacturing and Calico Printing Company Ltd popularly known as Calico Mills, has proposed to issue debentures for its working capital. This was disclosed by Mr Suhrid S. Sarabhai, chairman of the company at the annual general meeting in Ahmedabad recently. He said the working of company during the current four months was satisfactory and sales during April to July this year were higher by 18 per cent compared to that of the corresponding period last year.

Mr Sarabhai said the company had proposed to modernise its textile division. In the first phase, it had been decided to spend Rs 5.65 crores on renovation programme of the textile devision which is expected to be completed in two years, he added. In the Baroda division, it was proposed to double the production capacity of polyester fibre from 6,100 tonnes to 12,200 tonnes per annum. The chairman said the company would complete the centery of its existence on November 20, 1980.

Referring the previous year's working, Mr Sarabhai said the textile division could show satisfactory performance because of decline in cotton prices, but the production in the Bombay plant was hampered because of severe power cuts in Maharashtra. However on the whole the working of the company during 1978-79 should be considered satisfactory, he added. The chairman said efforts were being made to reduce the stocks and overdues to improve the liquidity of the working capital. He said if the power-cut could be relaxed in Maharashtra, the Bombay plant would show better performance. He indicated that the production of polyester fibre at Baroda plant had also gone up. Of the total production of 5,447 tonnes of polyester fibre in the country, the share of the Baroda plant was 1,500 tonnes.

Indian Cable

The Indian Cable Company Ltd has achieved sale of Rs 40.20 crores during the year ended March 31, 1979, against Rs 39.90 crores in the previous year. The exports during the year total Rs 2.84 crores. Although sales are marginally higher, the throughput is lower due to a 73-day strike at INCAB's Poona works and disruption of activities caused by the intra-union rivalry at the Jumshedpur works during the first half of the year. The company has successfully commissioned its project for the manufacture of cross-linked polyethylene (xlpe) cables during the year.

The profit after tax is Rs 1.10 crores being the same as in the previous year. The investment allowance reserve on the xlpe project absorbs Rs 30 lakhs. The directors have recommended a dividend of 12 per cent absorbing Rs 75 lakh as against 14 per cent previously.

Chemiequip

Chemiequip, a running company engaged in the manufacture of dyes and dyes intermediates for over 18 years, is to enter the capital market towards the third week of next month, offering 531,000 equity shares of Rs 10 each at a premium of one rupee per share. The issue is being made to finance partly its proposed expansion programme. Under the programme, the company proposes to set up a plant for the manufacture of 240 tonnes per annum of reactive dyes (vinyl sulphone group) at its existing plant at Ambernath, near Bombay at a cost of Rs 102.76 lakhs. It also proposes to manufacture leather dyes and sophisticated reactive dyes. The technical know-how for the new products as well as for the entire present product range has been developed indigenously by the company's research and development wing. The company has been paying a a dividend of 13 per cent since 1976.

Bharat Alums

The Bharat Alums and Chemicals Ltd has received a letter of intent to manufacture 200 tonnes a day of single superphosphate (phosphatic fertiliser) at Alwar in Rajasthan. The company has started implementation of the project. Construction work is in full swing and orders for machinery and equipment have already been placed. The plant is expected to be commissioned by the first week of December. This will enable the company to cater for the increasing fertiliser needs of the northern region. The management expects that the company will achieve a turnover of Rs 5 crores for the year ending July 31, 1980.

According to a survey conducted by the Fertiliser Association of India, the demand for single superphosphate is placed at 1.44 lakh tonnes in Rajasthan state alone. The company is expanding its sulphuric acid plant, set up at Alwar a year ago, to almost three times the original licensed capacity and is geared to produce 150 tonnes of sulphuric acid by September end. After the plant's expansion, the company will not only be able to bridge the gap between demand and supply in the northern region but also find its way to many other states. Within a year, production of sulphuric acid and oleum has doubled. In April this year the ferric alum plant was commissioned at its full capacity.

Pesticides and Brewers

Pesticides and Brewers reports a net profit of Rs 2.42 lakhs on sales of Rs 102 lakhs for 1978 as against a net loss of Rs 8.68 lakhs on sales of Rs 79 lakhs in the previous year. The profit as well as the write-back of Rs 4.25 lakhs from the development rebate reserve have been adjusted against the deficit of Rs 12.38 lakhs, leaving a debit balance of Rs 5.71 lakhs to be carried forward. The company has signed a preliminary collaboration agreement with Stauffer Chemical Company of the USA for process know-how and basic engineering as well as transfer of technology for setting up a 3,000 tonnes per annum high gamma BHC plant at Ratnagiri in Maharashtra. This project, according to the directors, would be the first of its kind in India.

Supreme Paper

Supreme Paper Mills Ltd has decided to enter the capital market with an issue of 675,000 equity shares of Rs 10 each for cash at par. The Rs 3.95 crores project will have an annual manufacturing capacity of 10,000 tonnes of writing, printing, packing and wrapping paper, in the village of Raninagar in Nadia district of West Bengal. The plant, a complete second unit imported from Holland, is designed to use primarily farm residues such as paddy and wheat straws, hessian and jute waste and bagasse, available in abundance locally. The trial production is stated to begin by the middle of the next year.

Orient Ceramics

Orient Ceramics has entered into technical collaboration with the West German firm, Agrob Anlagenbau GmbH, for the manufacture of glazed ceramic wall and floor tiles in white, coloured and printed designs according to international standards.

The project, with an annual capacity of 500 tonnes of tiles above 4″×4″ size, will be set up at Sikanderabad, 48 km from Delhi. It is estimated to cost Rs 247 lakhs and is to be financed by equity capital of Rs 90 lakhs and term loans of Rs 157 lakhs. The company proposes to enter the capital market in early October with a public issue of Rs 46 lakhs.

Agrob, which has 17 joint ventures/technical know-how arrangements all over the world, will not only supply basic know-how data and drawings but also depute their technicians for erection, commissioning and start-up of the plant. Plant and machinery will be both imported and indigenous. Machines such as tile presses, fettling and staking machines, screen printing machines, kiln burners, hydraulic pushers and accessories for glazing machines are being imported from West Germany. The company has an export obligation of 25 per cent of production in the first year and 30 per cent in the following four years. Agrob will assist the company in marketing its products abroad.

Rohit Paper

The directors of Rohit Pulp and Paper have recommended a bonus shares issue in the proportion of three bonus shares for every five equity shares held, subject to the Consent of the Controller of Capital Issues. The dividend has also been stepped up by two points to 14 per cent.

According to preliminary figures, the company's gross profit has expanded from Rs 33.16 lakhs in the previous year to Rs 90.24 lakhs in 1978-79, following spurt in sales from Rs 4.01 crores to Rs 7.14 crores. After providing Rs 24.42 lakhs (Rs 18.50 lakh) for depreciation and Rs 28 lakhs (Rs 3.25 lakhs) for investment allowance reserve, the net profit amounts to Rs 37.82 lakhs compared to the previous year's Rs 11.41 lakhs. The enhanced distribution will require Rs 8.40 lakhs (Rs 7.20 lakhs).

Khatau Junker

Khatau Junker proposes to enter the capital market some time in November 1979, with a public issue of Rs 24 lakh in equity shares with the view of financing partly the malathion and metallised PP condensor project at Ankleshwar, Gujarat. Excel Industries has agreed to offer technical collaboration and also to invest in the capital of the company, Mr V. Govindjibhai Shroff, chairman of Excel Industries, has also agreed to join the board.

The company is a renowned manufacturer of power factor capacitors having financial participation of Otto Junker GmbH, West Germany and technical collaboration of General Electric, USA with sanctioned capacity of two lakhs KVAR and five lakhs PCS condensors and have also got letters of intent for five lakhs PCS metallised PP condensors, three lakhs KVAR power capacitors and registration letter for the manufacture of 1,000 tonnes of malathion. The company started its operation in 1968. Since 1972 the company is making profits and has paid dividend regularly for the last seven years. The company issued bonus shares in the ratio of one-for-five in 1977 and one for four this year. The present capital of the company is Rs 30 lakhs with a gross profit of around Rs 20 lakhs,

Mafatlal Fine

The total turnover of Mafatlal Fine Spinning and Manufacturing Company during the first four months of the current year (April-July 1979) is slightly up by about three per cent to Rs 21.30 crores from Rs 20.57 crores in the corresponding period of the previous year.

At the annual general meeting of the company Mr Arvind N. Mafatlal, chairman said that the turnover would have been better but for the power cuts during this period. Its textile division accounted for Rs 18.61 crores against Rs 18.20 crores during the period showing a marginal increase of 2.16 per cent while its chemical unit accounted for Rs 2.69 crores against Rs 2.37 crores representing a rise of 13.4 per cent.

Its exports improved by 22.89 per cent to Rs 2.10 crores from Rs 1.71 crores reflecting an increase of 22.89 per cent. Subject to normal trading conditions, the company is expected to repeat at least last years performance in the current year too, if not improve it further.

During 1978-79 the company had spent Rs 11.99 lakhs on its flourocarbon gases plant in order to achieve flexibility in the product-mix with consequent improvement in profitability. Mr Mafatlal hoped that the returns on this investment would start accruing towards the end of the current year ending March 1980.

As a part of its programme for modernising weaving spinning and processing departments, the company has expanded Rs 122.86 lakhs in installing auto looms at its two units and updating the facilities in the processing house at Navsari.

Capital & Bonus Issues

The government has allowed six companies to raise their capital by issue of bonus share, public issues and mortgage debentures on a pro rata basis.

Sikka-n-Sikka Engineers Pvt. Ltd. has been allowed to issue bonus shares in the ratio of 1 : 1, **IVP Limited** in the ratio of 1 : 1 and **Killick Halco Limited** in the ratio of 1 : 2.

Hathwa Metals and Tubes Limited has been allowed to offer 1,900,000 equity shares to public by a prospectus to provide part finance for the project for the manufacture of copper and copper alloys and tubes.

Larsen and Toubro has been allowed to issue Rs 250 lakhs in 11 per cent redeemable mortgage debentures of Rs 100 each for cash at par on a pro-rata basis.

Capital appreciation in 1977-78

A study prepared recently by the Statistical Intelligence Division of the Department of Statistics, Reserve Bank of India, has revealed the heartening fact that the ratio of market value of paid-up capital of the ordinary shares of 1,764 joint stock companies appreciated by 5.7 per cent over the year ended March 1978, in contrast to the decline of 0.9 per cent witnessed in the preceding year.

The appreciation the study suggests, could be attributed to the several measures initiated by the government of India to activate the capital markets. The increases were due in a large measure to the new issues of a few companies which were quoted at a premium.

It is significant that, whereas the ordinary shares of joint stock companies commanded a premium of as much as 59 per cent over their paid-up value as on March 31, 1978, both preference shares and debentures were quoted at substantial discounts of about 30 per cent and 10 per cent, respectively, indicating that the investors were less influenced by considerations such as safety of capital and guaranteed return. Reproduced below are the details of this study appearing in the March 1979 issue of the *Reserve Bank of India Bulletin*.

STOCK EXCHANGES constitute an important segment of the capital market and play a vital role in the economy through effecting transactions in long term financial claims on government, semi-government institutions, joint stock companies, etc. A study of the movement of prices of securities traded in the stock exchanges, therefore, is useful in providing an insight into the investment climate in the country.

This review analyses the variations in the ratio between the market value and face value/paid-up capital as at the end of the financial years 1976-77 and 1977-78 in respect of each of the different categories of securities. The securities covered comprise ordinary and preference shares of joint stock companies quoted on the stock exchanges of Bombay, Calcutta, Madras, Ahmedabad and Delhi; interest bearing securities of central and state governments quoted on the Bombay stock exchange; bonds of semi-government institutions quoted on the Bombay, Calcutta and Madras stock exchanges and debentures of joint stock companies quoted on the stock exchanges of Bombay, Calcutta, Madras and Ahmedabad.

Limitations of Data

The scrips quoted on the stock exchanges at the two points of time considered in the review are not identical. There have been some deletions/additions during the intervening period. As the absolute figures of paid-up capital and market value at the two time-points are not strictly comparable, the analysis in this study is based on percentage variations in the ratios of market value to paid-up capital/face value of the scrips in order to bring out the broad directional changes.

The impact of new issues, which was found to be significant in respect of certain industries, has been briefly touched upon, while discussing the trends relating to ordinary shares. In addition, the percentage variations in the ratio of market value to paid-up capital in respect of scrips 'common' to both the time-points viz., March 31, 1977, and March 31, 1978, were also analysed to bring out the nature and extent of deviations as compared to the corresponding variations for 'all scrips'.

Second, as the analysis is based on the data at two points of time, viz., March 31, 1977, and March 31, 1978, it does not reflect the fluctuations in the market value of securities during the intervening period. It, however, brings out the relative post-budget situation in the stock markets in the successive years.

General Economic Conditions

The stock market is influenced by a number of factors. The investors' assessment of the current performance and future prospects of the corporate sector is one such important factor. Apart from the general economic conditions, specific economic, fiscal and monetary policy decisions of the government influence the behaviour of the stock markets through their impact on the current profitability and investment plans of the corporate sector, on the one hand, and the determinants of investors' decisions, on the other. A brief review of important economic developments and policy measures during the period would, therefore, provide an appropriate perspective for the analysis attempted here.

During 1977-78, there was general improvement in the growth of Gross National Product, domestic savings and foreign exchange reserves. However, the pace of industrial growth was hindered to some extent by shortage of power and consequential under-utilisation of capacity in certain industries.

During this period, the government initiated various measures to activate the capital markets, such as downward adjustment in the lending and borrowing rates of banks and grant of tax relief for investment in equity shares of new companies in the budget for 1978-79. The exemption limits for industrial licensing were raised and the restriction on imports of critical raw materials was relaxed.

Overall Position

The proportions (in percentage terms) of the market value to paid-up capital/outstanding as at the end of each of the two successive financial years 1976-77 and 1977-78 and the percentage variation of the latter over the former are set out in a summary form for the different categories of securities in the table (p 425).

It may be seen from this table that while the ordinary shares of joint stock companies were quoted at a substantial premium of around 50 per cent on the average at the end of March, 1977, the preference shares and debentures were offered at a discount of around 30 per cent in the case of the former and 10 per cent for the latter.

Further, the ratio of market value to paid-up capital, which was 150 per cent at the end of March, 1977, in respect of ordinary shares, rose to 158.6 at the end of March 1978, recording an increase of 5.7 per cent. The corresponding ratio in the case of central government securities, state government securities and debentures of companies improved by 1.2 per cent, 0.1 per cent and 0.3 per cent, respectively, while in respect of the securities of semi-government institutions and preference shares of joint stock companies, it declined marginally by 1.3 per cent and 0.6 per cent, respectively.

Investment Climate

The increase of 5.7 per cent in the ratio for ordinary shares during the year ended March 31, 1978, as compared with a decline of 0.9 per cent in the preceding year, **reflected the improvement in investment climate during the financial year 1977-78**. This is further corroborated by the fact that investments in the private corporate sector in the form of initial issues, rights and debentures at Rs 135.5 crores during 1977-78 showed a record rise as compared to Rs 82.1 crores in 1976-77.

Ordinary Shares

The analysis shows that by and large the market value of ordinary shares moved up at a faster rate than their paid-up capital as reflected in the increase in the ratio of the former to the latter as at the end of the two financial years. Industry-wise, 'foundries and engineering' recorded the highest increase (46.5 per cent) in the ratio, followed by 'cement' (42.4 per cent), 'transport equipment' (38.6 per cent) 'tea plantations' (25.0 per cent) and 'electricity generation and supply' (27.3 per cent).

Capital Appreciation

The other industries which showed an appreciation of over 10 per cent in the ratio were 'foodstuffs'—miscellaneous (19.9 per cent), 'iron and steel'—(17.9 per cent), 'paper and paper products' (15.4 per cent), 'metal products' (15.2 per cent) and 'tobacco' (12.4 per cent).

The increase in the ratio was rather modest at 5.3 per cent and 4.0 per cent in the cases of 'cotton textiles' and 'silk, woollen and rayon textiles', respectively.

The sharp increase in the ratio in respect of some of the industries enumerated above was attributable in a large measure to new issues of a few companies which were quoted at a premium, for example, Ennore Foundries and Best Crompton (foundries and engineering), Cadbury and Dalmia Dairy Industries (foodstuff—miscellaneous), Tata Finlay (tea plantations), K.S.B. Pumps (metals—miscellaneous), etc.

In general, the increase in the ratio reflected the buoyant condition of the stock market.

At the other end of the spectrum, were industries such as 'shipping', 'rubber and rubber products' and 'aluminium' which registered sharp declines of 45.4, 26.0 and 23.6 per cent, respectively, in the ratio.

When the scrips 'common' to both the years, viz., ending March 31, 1977 and March 31, 1978, are considered, it is observed that the percentage variations in the ratio of market value to paid-up capital moved more or less on lines similiar to those for 'all scrips'. Significant among the exceptions were 'tea plantations', 'transport equipment', 'metals and products—miscellaneous', 'chemicals and chemical products—miscellaneous', 'other industries—miscellaneous', 'other chemical products' and 'paper and paper products'. The marked deviations revealed by these groups were mainly on account of new issues of a few companies quoted at heavy premium and which were included under 'all scrips' but not under 'common scrips'.

Preference Shares

The aggregate market value of preference shares of all the industries was lower than their paid-up value as on March 31, 1978, as also on the corresponding date of the previous year. The ratio declined marginally by 0.6 per cent over the year.

Industry-wise, in respect of 'transport equipment', 'aluminium', 'silk, woollen and rayon textiles' and 'iron and steel', the ratio moved up by 9.2 per cent, 7.3 per cent, 5.9 per cent and 5.7 per cent, respectively. The highest depreciation in the ratio (of the order of 26 per cent) was registered by the 'miscellaneous' group under 'other industries'. On the other hand, 'electrical machinery, apparatus, appliances, etc.,' 'cotton textiles' and 'jute textiles' industries showed marginal declines of two to three per cent in the ratio.

Debentures of Companies

The ratio of market value to outstandings of debentures of 'all industries' appreciated marginally by 0.3 per cent over the year. Industry-wise, however, except for 'cotton textiles' (+ 0.2 per cent), 'miscellaneons' group (+ 0.5 per cent) and 'transport equipment' (+ 2.9 per cent), all other industries registered declines ranging between 0.6 and 6.4 per cent in the ratio.

Central and State Government Securities and Bonds of Semi-government Institutions

The central government securities were in better shape at the close of the financial year 1977-78 as compared with the position obtaining at the end of the preceding year. The market prices of Rs 100 loans of various periods of maturity appreciated by 40 paise to Rs 2.10, bringing the market value closer to the face value of the outstanding. The securities of the maturity period between 10 to 15 years, however, were down by 40 paise as compared with the price in the previous year. As one would expect, the price of the loans tended to move inversely with the period of maturity. Thus, securities maturing in 'less than one year', '1-5 years', '5-10 years' and '10-15 years' were quoted at Rs 100.30, Rs 98.80, Rs 97.30 and Rs 96.00 respectively. The securities maturing between '15-20 years' and' '20 years and above' were, however, quoted at comparatively higher prices viz., Rs 99.90 and Rs 96.70 respectively.

This is explained by the fact that securities maturing after 15 years carried relatively higher rates of interest.

The non-terminable loans of 3 per cent—1986 or later and 3 per cent government paper remained unchanged at Rs 60.00 and Rs 59.50, respectively.

The market value of state government securities of different maturity periods as on March 31, 1978, was higher by 10 paise per Rs 100 loan compared with the previous year's price and hovered around their face value. All the securities of semi-government institutions were quoted below par at the close of each of the financial years 1976-77 and 1977-78; however, their market price as at the end of the latter year was higher than that in the former.

The securities of state electricity boards were an exception in that their market price was lower by about Rs 2 at Rs 97.60 as at the end of March, 1978. The market price of bonds of port trusts was higher by 90 paise on March 31, 1978, when compared with their price a year ago. The bonds of other institutions viz., municipal corporations and financial corporations were quoted at Rs 99.20 and Rs 99.40, respectively, the former having appreciated by 20 paise and the latter remaining unchanged.

To sum up, the year 1977-78 witnessed a marked improvement in investment climate as shown by an increase of 5.7 per cent (as against a decline of 0.9 per cent in 1976-77) in the ratio of market value to paid-up capital of ordinary shares and 1.2 per cent in the corresponding ratio for the central government securities. Ordinary shares of joint-stock companies commanded a premium of as much as 58 per cent over their paid-up value. The market values of 'preference shares' and 'debentures' were quoted at substantial discounts of about 30 per cent and 10 per cent, respectively, indicating that the investors were less influenced by considerations such as safety of capital and guaranteed return.

As the central and state government securities are near money in the liquidity scale, the market value of their outstanding is very close to their paid-up value/face value. The prices of these securities are, however, determined by larger considerations such as the interest rate/yield rate structure in the economy.

Variations in Market Value of Securites

Type of Securities	No. of Companies/Securities as at the end of		Proportion (per cent) of market value to paid-up capital/outstanding as at the end of		Percentage variation of col. 5 over col. 4.
	March 1977	March 1978	March 1977	March 1978	
1	2	3	4	5	6
Ordinary shares	1712	1764	150.0	158.6	+5.7
Preference shares	520	523	70.5	70.1	—0.6
Debentures	89	81	89.6	89.9	+0.3
Central government securities	49	50	95.3	96.5	+1.2
State government securities	204	210	99.9	100.0	+0.1
Semi-government institutions	156	160	99.4	98.1	—1.3

World Crude Steel Production: 1974-1978

(Million metric tons)

	1978	1977	1976	1975	1974
USSR	152.0	146.6	144.8	141.3	136.2
USA	123.8	113.2	116.1	105.8	132.2
Japan	102.1	102.4	107.4	102.3	117.1
F. R. of Germany	41.0	39.0	42.4	40.4	53.2
China	31.0	23.4	21.0	26.0	26.0
Italy	24.4	23.3	23.5	21.9	23.8
France	22.8	22.1	23.2	21.5	27.0
UK	20.2	20.5	22.4	19.8	22.4
Poland	19.5	17.7	15.6	15.0	14.6
Czechoslovakia	15.4	15.1	14.7	14.3	13.6
Canada	14.9	13.6	13.3	13.0	13.6
Belgium	12.6	11.3	12.1	11.6	16.2
Brazil	12.1	11.2	9.3	8.4	7.5
Romania	11.6	11.5	11.0	9.5	8.8
Spain	11.3	11.2	11.0	11.1	11.5
India	**9.4**	**10.0**	**9.4**	**8.0**	**7.1**
South Africa	7.9	7.3	7.1	6.8	5.8
Australia	7.6	7.3	7.8	7.9	7.8
German Democratic Republic	6.9	6.9	6.7	6.5	6.2
Mexico	6.8	5.6	5.3	5.3	5.1
Netherlands	5.6	4.9	5.2	4.8	5.8
Luxembourg	4.8	4.3	4.6	4.6	6.4
Republic of Korea	4.7	4.2	3.5	2.0	1.9
Austria	4.2	4.1	4.5	4.1	4.7
Sweden	4.2	4.0	5.1	5.6	6.0
Hungary	3.9	3.7	3.7	3.7	3.5
Yugoslavia	3.5	3.2	2.8	2.9	2.8
Taiwan (ROC)	3.5	1.8	1.6	1.0	0.9
Democratic Republic of Korea	3.2	3.2	3.0	2.9	3.2
Argentina	2.7	2.7	2.4	2.2	2.4
Bulgaria	2.6	2.6	2.5	2.3	2.2
Finland	2.3	2.2	1.6	1.6	1.7
Turkey	2.3	1.9	2.0	1.7	1.6
Others	11.7	10.3	10.1	9.8	10.0
Total	712.5	672.3	676.7	645.6	708.8

Source: IISI

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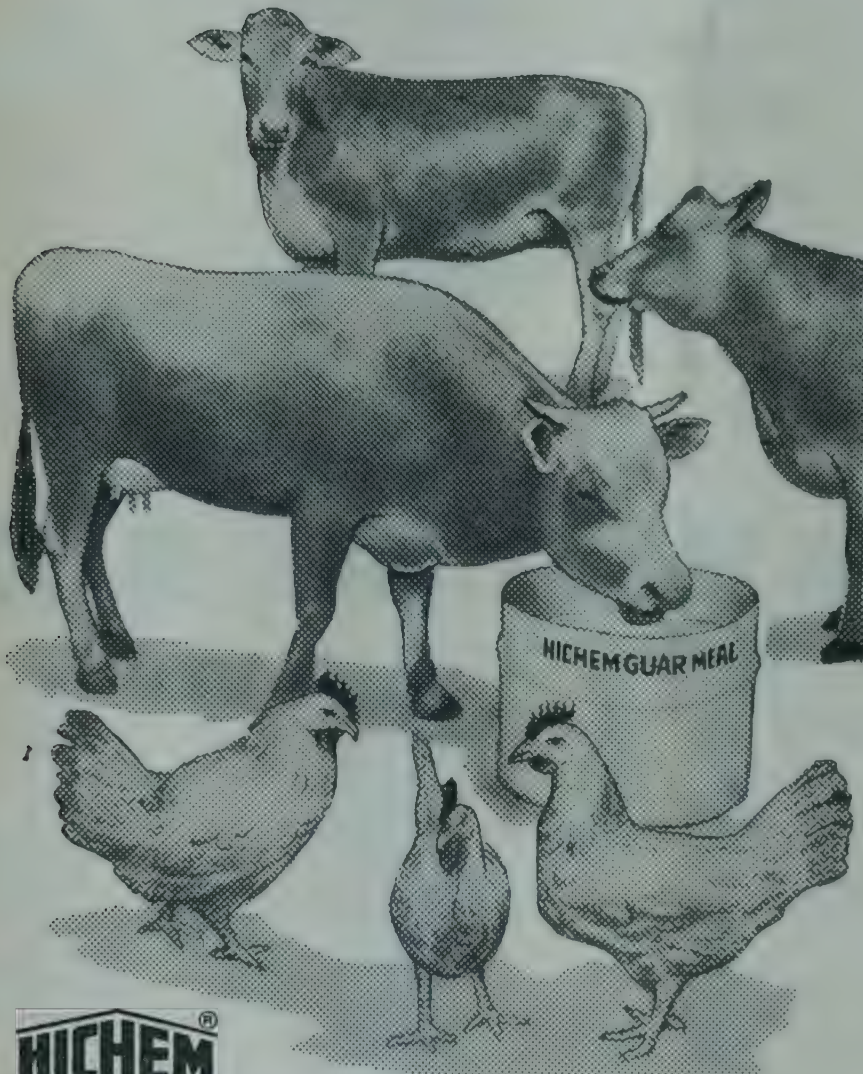

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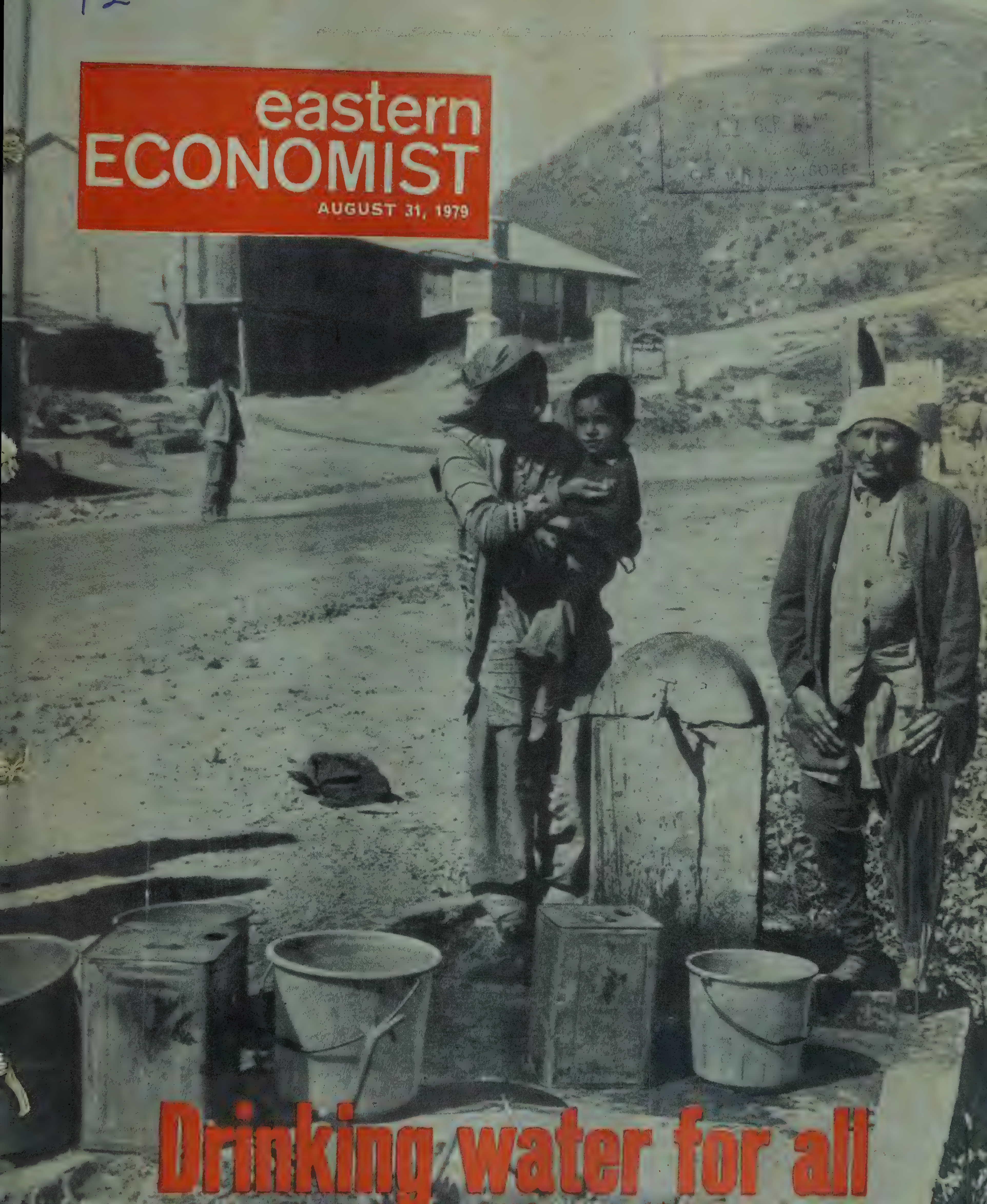

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On to December polls

IT INDEED is ironical that the coalition government of the Janata (S), the Congress (S), the AIADMK and the breakaway groups of the Janata party led by Mr H.N. Bahuguna and Mr Biju Patnaik under the leadership of Mr Charan Singh, which did not face Lok Sabha even for a day and in administrative parlance remained on probation for just 24 days, is to continue in office as caretaker government for nearly five times that period till the fresh elections to parliament which have been ordered by the president, are completed by the end of this year. The Election Commission has a herculean task to perform, as Mr S.L. Shakdher was on record recently to have observed that it will take at least six months for the fresh polls to be organised. This period has now to be compressed into less than four months for three reasons. First, the important amendment to the Constitution seeking to extend the reservation for scheduled castes and scheduled tribes beyond January 26, 1980, has to be effected before that day. Second, six months cannot go by between the last sitting of the dissolved House and the assembling of the new House. These two reasons, of course, would have warranted the Election Commission to complete the polls by early January. But that would have necessitated the revision of electoral rolls on the basis of eligibility as on January 1, 1980. By holding the election in December, this major hurdle is being obviated. Mr Shakdher has indicated that over a million and half persons are being pressed into service to complete the revision of the electoral rolls well in time on the basis of eligibility for franchise as on January 1, 1979. The task is proposed to be taken up with effect from September 1.

The advisability of Mr Charan Singh's caretaker government, which incidentally could not be fully constituted and, therefore, is dominated by the Congress(S), continuing till the elections are completed, of course, has been questioned by the Congress (I) as well as the Janata party. Although the CPI(M) has defended the action of the president to dissolve Lok Sabha, it also is understood to be not averse to some other caretaker government provided the composition of the new government is acceptable to the major political parties represented in parliament. Two cases have as well been instituted in the Madras High Court questioning the validity of Mr Charan Singh's caretaker government. It is difficult to say how far both the Congress(I) and the Janata party will press this point and what the outcome of the Madras cases will be for the issue involved is constitutional on which opinions are bound to differ. The president, of course, has done well in advising the caretaker government that it should not take any policy decisions during its tenure.

Over three months' period, of course, is not inadequate for the political parties preparing themselves to face the electorate. Steps have already been initiated by them for drawing up the battle-lines and negotiations are being held on the national as well as the regional levels for poll adjustments. The picture can be expected to clear up in a couple of weeks. The initial euphoria in the non-Congress (I) and non-Janata circles of a third force emerging under the leadership of Mr Charan Singh through the Janata (S), the Congress (S), the leftist groups and some other regional parties entering into an electoral alliance seems to be yielding place to greater realism. It remains to be seen how the hurdles in the way of the formation of this third force will be overcome and whether this expectation will fully materialise. The possibilities of some unexpected alliances emerging at the state levels cannot be ruled out.

But there can be no denying the fact that the coming elections will be far different from the past polls. It will be for the first time that three forces will be contending for supremacy. They appear to be almost equally balanced at present, notwithstanding the charismatic personality of the Congress (I) leader, Mrs Indira Gandhi, and the appeal of Mr Charan Singh amongst the farming community and of his presently-indicated allies among various weaker sections, including Muslims and backward classes and also labour. So far as the Janata party is concerned, Mr Jagjivan Ram's halo amongst the Harijans and the backward sections is an asset. Another factor for its success can be that for the first time the upper castes in the Janata party will be going to the poll under the leadership of one who has been all through his life a champion of the downtrodden, the majority of whom belong to the scheduled castes and scheduled tribes.

wooing Harijans

If Mr Jagjivan Ram is able to cash in on the feeling, right or wrong, amongst the Harijans that he was prevented from becoming the first Harijan prime minister of the country and can sway the Harijan votes in favour of his party, it will make a material difference to the fortunes of the other two contenders. Apart from the constituencies reserved for the scheduled castes and scheduled tribes, the Harijan vote is substantial in almost all the constituencies in the country. Triangular fights, which cannot be avoided in an overwhelming proportion of the constituencies can throw up very unpredictable results. Presumably, this is the consideration why overtures are understood to have been made by both the Congress (I) and the Janata (S) to Mr Jagjivan Ram to join them. They, of course, have not found favour with him.

The prospects of a single cohesive party emerging with a comfortable majority in Lok Sabha after the ensuing elections appear to be highly suspect, even though this may amount to crystal-gazing. If no party emerges with an absolute majority, political uncertainties are bound to get accentuated which will seriously jeopardise both the short-term and the long-term interests of the nation. The growth of the economy has suffered not insignificantly due to political wrangles right since 1966, despite some bright patches occasionally. With the inflationary trends getting strengthened, what is needed is an efficient, cohesive government at the centre.

Whither credit planning?

The Reserve Bank authorities have been behaving like King Canute in ordering a roll back of credit limits by the scheduled commercial banks even while asking them to extend liberal assistance to small borrowers in the priority sector. The governor of the central banking institution has had discussions with the chief executives of major banks on four occasions since November last year. These discussions have always proceeded on the assumption that undue credit expansion by banks has been mainly responsible for the fast growth in money supply in the past three years. It has been conveniently or deliberately overlooked that the additions to money supply have been due to heavy procurement operations, large scale deficit financing by the central government, extension of credit to small borrowers in the priority sectors and continuing inflow of the remittances from non-resident Indians, and not mainly on account of credit expansion to the commercial sector.

The directives of the Reserve Bank have been so unimaginatively conceived that the lending institutions have found it difficult to observe them. Until recently these directives were honoured more in the breach than in observance. In the earlier stages, the attempts to restrict credit were made by limiting lendable funds. It was, thus, enjoined by the Reserve Bank in November last year that not more than 40 per cent of incremental deposits should be used for extending credit in the four months December-March 1979. The statutory liquidity ratio was raised by one per cent to 34 per cent and it was even stated that the revised ratio should be applied scrupulously in respect of fresh deposits even when the SLR was higher than the revised minimum. The cash reserve ratio was kept unchanged at six per cent and the new deposits were impounded on the same basis as before.

The actual developments during the 1978-79 busy season came about on entirely different lines and the increase in non-food credit even with an impressive growth in deposits was over 71.5 per cent of the incremental deposits in the four month period under reference. The position became so difficult that many banks found it necessary to default in the maintenance of the cash reserve and liquidity ratios even after securing large amount through participation certificates and making use also of the limited refinance facilities provided by the Reserve Bank. The latter reviewed the position again in March and the erring banks were told that penal interest rates would be charged for borrowings against refinance facilities in respect of the portion representing shortfalls in observance of cash reserve and liquidity ratios. Many institutions preferred to pay penal interest charges as the adjustments could not be completed before the end of March.

credit curbs

The credit policy for 1979-80 would have been usually formulated early enough for enabling banks to plan disposition of their funds over a period. But at the meeting of the governor with the chief executives of banks on May 15, 1979, no new decisions were taken. The bankers were only told that there had been no change in the cash reserve and liquidity ratios and that the directives should be scrupulously observed. It was also indicated that fresh credit expansion in 1979-80 should not be more than the dimensions of 1978-79. Indeed, attempts had to be made to reduce even the increase in advances to levels below the growth of 1978-79. It was, of course, suggested that recourse to outside funds in the form of participation certificates and borrowings from the call market should be restricted and even avoided and the refinance facilities too should not be used liberally. The broad assumption was that only the lendable funds after fulfilling the directives of the Reserve

Bank, working out to about 45 per cent of incremental deposits, should be used for expanding credit for various purposes, excluding food advances. It is ironical that the discussions were insincere and the Reserve Bank was only refusing to recognise the realities of the situation. It must, of course, be stated here that there was opposition to the views expressed by the representatives of the Reserve Bank from bankers attending the conference and for the first time the communique was prepared by the RBI after the discussions and not issued immediately after the conference on the basis of the decisions already taken by the RBI.

insincere approach

The subsequent attempt in July was to restrict the role of participation certificates and banks were informed that the funds arranged in this manner would be liable to be included on a defined basis for observing cash reserve and liquidity ratios and that there should be a planned reduction in the outstanding amount. Some efforts have been made by banks to reduce this outstanding. But banks have preferred to flout the directives and use also the refinance facilities as the demand for funds continued unabated.

The futility of the exercise of the Reserve Bank will be clear from the fact that non-food credit has risen abruptly between March 30, 1979, and August 10, 1979, by Rs 1,056 crores and food credit by Rs 766 crores against the growth in deposits of Rs 1,826 crores in the same period. There was, thus, utilisation of nearly the whole of additions to deposits for lending purposes, while non-food credit alone accounted for little less than 66 per cent of incremental deposits. In the corresponding period in 1978-79, non-food credit rose by only Rs 7 crores and food credit by Rs 434 crores, against the increase in deposits by Rs 1,248 crores. In the 12 months ended August 10, 1979, aggregate advances have risen to the extent of Rs 4,111 crores with the share of food credit being Rs 558 crores, as compared to the increase in deposits for Rs 5,242 crores. In the twelve months ended August 11, 1978, there was no similar demand for funds as total credit was higher by only Rs 1,812 crores against the growth in deposits of Rs 4,152 crores.

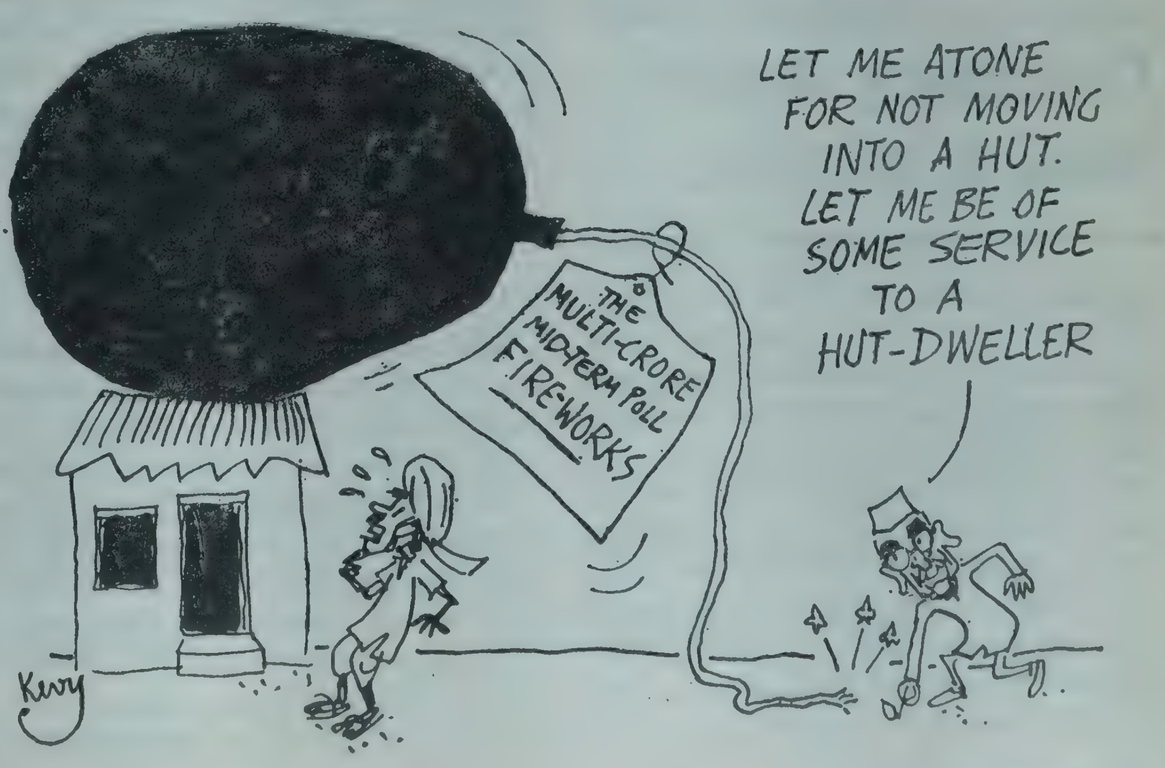
The expansion of credit for all purposes was Rs 2,730 crores in 1978-79, food advances accounting for Rs 226 crores. Can it be contended now that credit expansion, excluding food advances, can be restricted to about Rs 2,500 crores when growth has been Rs 3,553 crores in the 12 months ended August 10, 1979, and Rs 1056 crores between March 30, 1979, and August 10, 1979, and Rs 2,497 crores between August 11, 1978, and March 30, 1979? It may not be correct to assume that total credit expansion will have to be in excess of Rs 3,500 crores, taking into account the experience of the latter half of 1978-79 and the developments in the current financial year so far. But it will be a Herculean task if credit expansion to be restricted to even Rs 3,000 crores in 1979-80, as the impact of rising prices will be fully felt only in the coming months when earlier lower priced inventories have to be replaced by purchases at ruling prices.

In the face of these developments, the latest directives of the Reserve Bank are again hallow. There is considerable confusion in the banking circles as it is felt that earlier advances cannot be recalled at short notice. The new formula for determining the drawing power of the borrowers on the basis of actual utilisation of credit limits in the past two years is bound to create hardships for the borrowers. The earlier utilisation of credit limits may be higher only in the case of textile industry and perhaps sugar industry when there is heavy accumulation of stocks and high prices for cotton. The drawings of textile and sugar mills are now at much lower levels than in 1977 and 1978. But other industries have to contend with a sharp rise in prices while imported products will be increasingly costly.

Again it has not been explained who are the culprits and why borrowing has been on such a heavy scale. The steel industry has lower stocks of raw materials and finished steel. The cement industry is selling its production concurrently. There is demand for heavy chemicals, fertilisers and indeed for all manufactured goods. How then has the accumulation of inventories come about? There is no proper explanation from bankers or the Reserve Bank authorities.

Presumably, there are large stocks of imported edible oils, non-ferrous metals, crude and petroleum products at higher prices and the like. As prices have also risen, there may be some inflated value of advances. If imported stocks are held or bottlenecks in distribution prevent the brisk offtake of goods in short supply, the best course will be to arrange for expeditious disposal of these stocks for releasing bank funds and preventing manipulation of open market prices.

Instead of deciding on new strategies and instituting arrangements for deter-


LET ME ATONE FOR NOT MOVING INTO A HUT. LET ME BE OF SOME SERVICE TO A HUT-DWELLER
THE MULTI-CRORE MID-TERM POLL FIREWORKS
Kury

mining how exceptional rise in advances take place, the Reserve Bank has made an unjustified attempt to choke banks and create needless difficulties for genuine borrowers by physically restraining the grant of fresh credit. The earlier attempts were in the direction of restricting the quantum of lendable funds. The move is now to prevent even the use of these funds by slashing cash credit limits arbitrarily. The reduction may even be 40 per cent of cash credit limits in individual cases and banks are feeling unequal to the task of monitoring individual accounts and fixing workable credit limits.

The new formula for refinance of food credit may not pose any immediate difficulties as the quota has been utilised only to the extent of 40 per cent. But difficulties may arise when procurement credit tends to rise when purchases are made out of kharif crops during November and December. The Reserve Bank, therefore, has a duty to re-examine the whole situation. No useful purpose will be served by saying that credit cannot be increased for absrobing the effect of the recognised increase in prices as in the case of steel, cement, heavy chemicals and other items. The whole situation will get out of hand if there is no correct understanding of the new trend and it is not also realised that the contribution of credit expansion to money supply is not so significant as is made out to be and bungling by government departments has been mainly responsible for the present chaotic situation.

Containing deficit, holding priceline

ALTHOUGH IN the light of the directive of the president, Mr N. Sanjiva Reddy, the caretaker government of Mr Charan Singh at the centre is not expected to take any policy decisions, it does not feel that it is not within its competence to take measures to contain the pressures developing in the economy, particularly on the prices front. In a communication to the Janata party chief, Mr Chandra Shekhar, countering his criticism of the decision of the government to exempt sponge iron imports from customs duty, the central Finance minister, Mr H. N. Bahuguna, has stressed: "We are fully aware of the proprieties which have to be observed by the caretaker government. At the same time I would like to point out that the guidelines for the caretaker government cannot come in the way of urgent economic issues which cannot wait for being dealt with appropriately. Imports of raw materials and commodities have to be effected from time to time to relieve domestic shortages and maintain levels of production and employment in important sectors of the economy. Adjustments in customs duty may be necessary in such cases so that the landed cost of imports may be at economic level. The government cannot abdicate its responsibility to take decisions regarding adjustments in customs duty".

inordinate delay

The decision to exempt sponge iron imports from customs duty, he has pointed out, in fact, was taken by the Janata government as long back as June 29, 1979. The formal notification giving effect to this decision could be issued only on August 22.

Mr Bahuguna's above clarification, though welcome, raises an important issue. It is that inordinate delays take place between the taking of decisions and their implementation, sometimes with dire consequences on the economy. It is a sad commentary on the current working of the governmental machinery. With inflationary tendencies gathering momentum and not expected to exhaust themselves for another couple of months, and that too if some unforeseen factors do not intervene in the meanwhile, it is urgently required that the implementation of the decisions taken should be expedited to the maximum.

The current thinking in Finance ministry circles indicates that the government might soon take steps to further restrict bank credit to the trading sector, especially in regard to the essential items of mass consumption so that the turnround of such commodities can be quickened. The specific commodities mentioned in this regard are sugar and gur, edible oils, steel, cement and paper. The uptrend in the prices of all these commodities has got accentuated in the recent week With the festival season fast approachi a firm grip on the prices of sugar a edible oils is proposed to be kept. T augment the availability of sugar in th market, this month's release has alrea been enlarged to six lakh tonnes fro 5.25/5 lakh tonnes in the recent month The State Trading Corporation has bee asked to release adequate quantities o edible oils especially in areas where shor ages have developed in the past few days

In the interest of containing the bud getary deficit to the centre, it has bee suggested to the Planning Commissio that it should carry out an exercise t assess whether some Plan expenditures especially in the social services sector could be phased out. Steps have als been initiated for a quicker realisation o income-tax and excise duty arrears.

It has been indicated to the state chie ministers that owing to the presen budgetary position of the centre, it wil not be possible for it to go ahead with the plan to provide compensation to them for the abolition of octroi. The decision to this effect was taken during Mr H. M Patel's tenure in the Finance ministry and the modalities of giving effect to it were being worked out.

Indications are that the bank rate may not be raised for the time being. A final decision on this issue, however, is yet to be taken.

Fostering cooperatio with US

THE UNITED States is one of the two largest partners in our trade. Its ranking vis-a-vis the other major partner, the Soviet Union, changes occassionally depending on the developmental progress of the country and such other factors as the rate of growth particularly in the industrialised world. Yet the week-long conference held here from August 19 to 25, at the initiative of the Association of Indians in America, to deliberate upon the new perspective of Indo-US economic cooperation was fully justified. There is the continuing need for strengthening relations between the two largest democracies of the world.

The growth in Indo-US trade, as in India's trade with the Soviet Union, has been remarkable in the post-independence era. Currently the two-way commercial transactions between India and the US aggregate to around two billion dollars per annum, the balance of trade being in our favour. Encouragingly enough, this trade balance has tended to grow during the last three years from $6.85 million in 1977 to $31.5 million last year and as much as $39.8 million during the first five months of the current calendar year.

technical expertise

In the field of technical and financial cooperation also, the situation is no different. Notwithstanding the fact that there is an accent on making use of appropriate technology in the interest of creating new employment opportunities at low cost, there is clamour for securing the latest technical expertise in many fields from the United States. The US investment in our industries, of course, has suffered some setback recently with the IBM and Coca-Cola being obliged to cease their operations and the taking over by the government a few years ago of Esso's petroleum refinery and distribution network. Nevertheless, the US investment in India is substantial.

Despite remarkable growth, our trade with the US is considered much less than what is commensurate with possibilities. Our share in the total American imports works out to just about half a per cent.

The Indo-US economic cooperation, undoubtedly, ought to have grown at a much faster rate than has been the case hitherto. The uneven course of political relationship has been a major contributory factor to this. Whereas we have perceived the US to be mainly following the policy of tilt in favour of our hostile neighbours, there seems to be a feeling among the Americans that in the name of neutrality we are somewhat more inclined towards the Soviet Union. Much more than this, however, the setback to our relations with the US was caused by the nuclear implosion by us a few years ago and the pressure brought to bear upon us by the Americans for stultifying the nuclear research effort, even though serious efforts are being made by the US to enlarge its economic relations with the People's Republic of China, which is one of the four nations possessing nuclear warfare capabilities. A thaw in the Sino-US relations came just four years ago during the regime of Mr Carter's predecessor. There appears to be inadequate appreciation on the part of the US of our aspirations. Any aberration in the relations between the two is often blown up out of all proportions.

The deliberations of the last week's conference need to be appreciated against this background. The conference was attended by academic and government economists and private trade and industry interests from the two countries. It concluded on a positive and optimistic note. There was a general consensus that there was sufficient room for expansion of trade flows between the two countries.

One may not fully agree with the view expressed at the conference that one of the problems inhibiting closer trade and economic cooperation between the two is our "negative" image in the developed world. This view was shared even by some of the American participants who pointed out that notwithstanding the fact that the foreign investment policy of the government of India was somewhat restrictive, there still existed good scope within the present framework of this policy for American investments. The American investors could avail of the opportunities offered especially when India was very scrupulous in fulfilling its commitments to foreign investors.

Efforts obviously are needed to counteract whatever adverse feelings might be there in the developed world about our capabilities and competence as a trading partner. The emphasis placed at the conference that the general North-South multinational dialogue should be supplemented by more direct dialogue between India and the US needs to be endorsed. The conference felt, and quite appropriately, that the US-China bilateral economic cooperation can be expected to provide a new base in the Indo-US dialogue.

It was also stressed at the conference

eastern ECONOMIST
Vol 73 No. 9 August 31, 1979
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IN THE NATION 431-437
On to December Poll
Whither Credit Planning?
Fostering Cooperation with US
Containing Deficit, Holding Priceline
An Unkind Cut
The Villain of the Piece
WINDOW ON THE WORLD 438-441
Et Tu Brute
World Farm Prospects
The Havana Summit
Sri Lanka's Tamil Problem
Sweden Exports for Recovery
COVER FEATURE 442
Drinking Water for All
MOVING FINGER 450
POINT OF VIEW
Enlightened Exporting Community —*R. Jayapal* 451
Estimates of Production Functions in Jammu & Kashmir Agriculture —*Nisar Ali* 453
Human Motivation and Indian Perspective—*Dr P. Kumar Srivastava* 457
TRADE WINDS 459
COMPANY AFFAIRS 463
RECORDS & STATISTICS 467
Current Statistics

at exclusive reliance on the communi-
tion lines within the official framework
 the two countries had restricted ade-
ate information flows between the two.
was suggested that the Indian chambers
 commerce should consider a plan for
ablishing a centre of economic com-
unication in the US.

The third major recommendation of the
nference that there was need for inten-
e quantitative research on trade and
vestment flows between the two coun-
es also was quite judicious. It needs to
 initiated and linked with the global
ade model.

The need for aggressive salesmanship,
ict adherence to quality standards
d delivery schedules, etc, cannot be
er-emphasised. Endeavours at expan-
on of trade can succeed only if the im-
rters are fully satisfied with the perfor-
ance of exporters.

An unkind cut

E DECISION of the government of India
 withdraw the five per cent cash assis-
nce for hessian and to reduce it in the
se of carpet backing exports from 10
r cent to five per cent seems to have
en taken without a proper appreciation
 the problems facing the jute industry.
is true that the export performance in
 first three months of the current
ancial year was satisfactory as compar-
 to the corresponding period of the
evious year. Exports in April—June,
79, amounted to 1.22 lakh tonnes, as
ainst 1.14 lakh tonnes in these two
onths of 1978, and the earnings increas-
 from Rs 60 crores to Rs 70 crores.
ere was also an improvement in the
it-value realisation. But is it realistic
 slash the subsidy or remove it merely
 the basis of the better performance
 just a few months? The central Com-
rce minister expects the export earn-
s in 1979-80 to go up to Rs 250 crores
m Rs 231.3 crores last year. But it is
evant to recall that in 1974-75, the in-
stry's export earnings had amounted to
r Rs 294 crores, which declined to
out Rs 250 crores in 1975-76.

n the recent months, the juts industry has been experiencing a substontial increase in the cost of production due to reasons beyond its control. The acute power shortage by itsalf has sharply escalated the costs. Though some mills have captive generating sets, they face difficulty in obtaining timely and adequate supply of diesel oil.

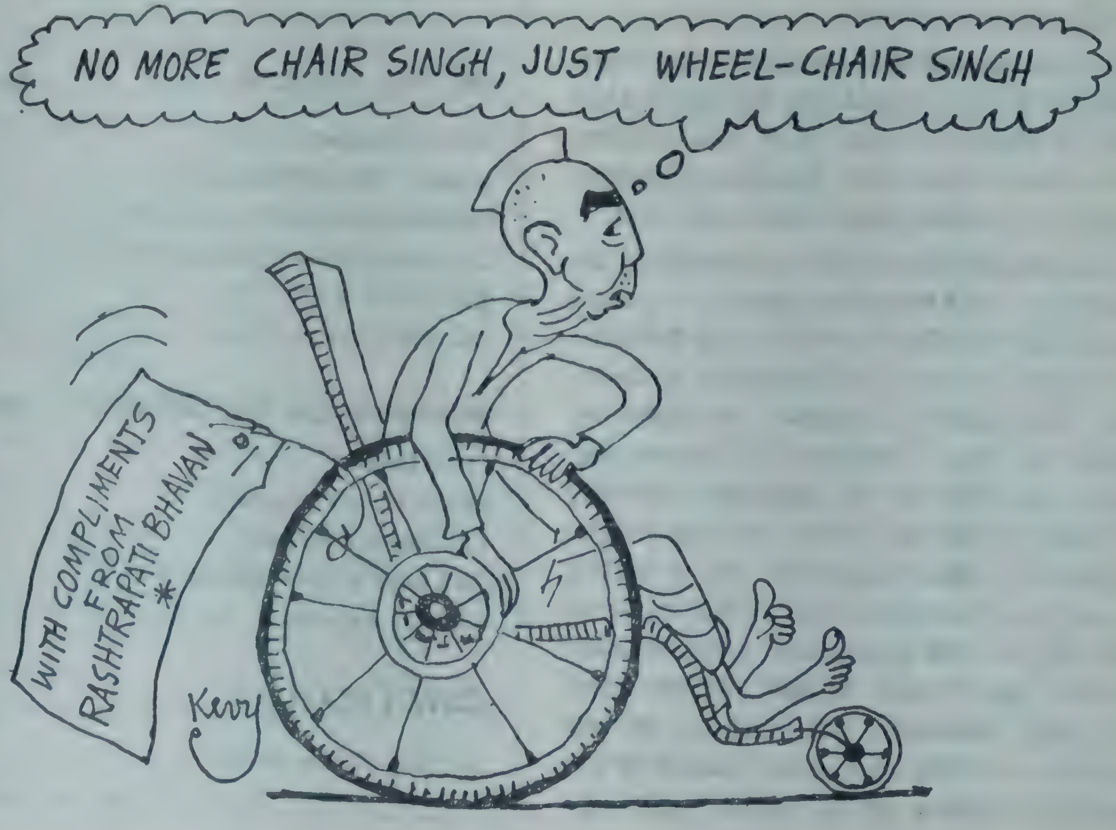
exorbitant cost

Moreover, the costs of generating electricity by these sets is about five times the cost of electricity from the state grid even after getting diesel at controlled rates. Besides, the ocean freight rates are often suddenly and steeply increased, and work in the Calcutta port is deliberately dislocated from time to time by agitations launched by some sections of workers or the other. Since the middle of November last year, the port's operations have been paralysed by a prolonged strike by bargemen, followed by strike by workmen of other categories. As a result, the confidence of foreign buyers in the jute industry's ability to ship its goods according to schedule has been shaken.

The government should have taken all these and other relevant factors into consideration while assessing the profitability of the jute industry and its outlook in the coming months. The increase in the crude oil prices will, of course, strengthen the competitive capacity of the jute industry vis-a-vis synthetics. But the industry will be able to take full advantage of the situation only if some of its major constraints are removed or made less severe. It should also be remembered that the industry needs substantial funds for modernisation. The soft loan scheme has failed to click and therefore the implementation of this programme will be delayed indefinitely unless the mills are enabled to earn more profits and plough them back.

The government of India introduced the cash compensation scheme for the jute industry in October, 1975. The amount paid under this scheme was Rs 199.57 lakhs in 1975-76, Rs 702.40 lakhs in 1976-77, Rs 1703.64 lakhs in 1977-78 and Rs 1602.70 lakhs in 1978-79 (upto 31.1.1979). The payment of the subsidy should not be grudged since, in its absence, the industry would have found it difficult to face the competition from synthetics and also from Bangladesh.

Incidentally, it is interesting to note that the government of Bangladesh also gives subsidies to its jute mills to enable them to maintain and improve their capacity to face the competition from their rivals. The amount of such subsidy given in 1976-77, 1977-78 and 1978-79 was


NO MORE CHAIR SINGH, JUST WHEEL-CHAIR SINGH
WITH COMPLIMENTS FROM RASHTRAPATI BHAVAN *
Kerry

taka 138 crores. In these circumstances, how can New Delhi afford to adopt a short-sighted policy on short-term considerations?

The villain of the piece

WHEN THE secretary of the central ministry of Steel, Mines and Coal, Mr Mantosh Sondhi, visited Calcutta for two days in the third week of August, he finalised a scheme for augmenting the production of power, coal and steel. But it seems doubtful, indeed, if it can be implemented effectively in the coming months. Under this plan, the highest priority is to be given to the movement of coal by rail to the thermal power plants, especially to those which meet the needs of collieries and the steel plants. The railways are reported to have agreed to raise the coal movement to the thermal plants from the present level of 2.6 million tonnes a month to 2.8 million tonnes by November and to three million tonnes in the subsequent months. But will they be able to rise to the occasion?

It is relevent to recall that in 1978-79, the railways could not even reach the average coal loading figures which they achieved in 1968-69. Thus, themonthly average coal loadings from the West Bengal and Bihar coalfields in October, 1978 was 5,454 wagons compared to 6,327 wagons in October, 1968. In March this year, this figure was 5,991 wagons, as against 6,626 wagons in March last year. In the context of this performance, will it be really possible for the authorities concerned to bring about proper coordination so as to ensure the smooth movement of coal by rail?

On March 16 this year, in a statement made in the West Bengal Assembly, the chief minister, Mr Jyoti Basu, explained how the inadequate and irregular supply of coal and its poor quality were creating serious difficulties for the power plants. He said: "This is a commodity which is produced in West Bengal but we do not get the best quality. The coal supplied to our power stations is said to contain a high percentage of ash and the ash is also said to be of corrosive quality. And it is this ash which leads to tube failures in our boilers. There are problems even in the transportation of coal of this dubious quality. There are three agencies involved in this, namely, the supplier (and that is an undertaking of the government of India), the railways and the West Bengal State Electricity Board. Apparently, the fullest coordination in the work of these three agencies has not yet been achieved." If this was the state of affairs when there was no cabinet crisis in New Delhi, is it realistic to expect efficient coordination to take place in the present situation with so much political uncertainty and its inevitable impact on all levels of the administration?

Mr Sondhi's discusssions in Calcutta did not seem to have concentrated on the need for improving the quality of coal. This is of crucial importance not only for the power plants but also for the steel and other industries. The average ash content of the coal supplied to the steel plants was 20.0 per cent in 1969-70, but in 1977-78 it was 22.5 per cent. Mr Sondhi has advised the steel plants to step up, in due course, the daily coke oven pushings. But how far is this possible in the absence of a substantial improvement in the quality of coal? It is worth noting that every one per cent increase in the ash content of coke over 20 per cent brings down productivity by four per cent and raises the consumption of coke by about 25 kg per tonne of hot metal.

Mr Sondhi disclosed that arrangements had been made to import coking coal at the rate of 100,000 tonnes a month and that proposals for importing at least one million tonnes for the next year would be finalised shortly. But what steps are being taken to ensure normal functioning of the Calcutta port and provide the necessary arrangements for scientific blending? Unless the economic departments at the centre work together in a spirit of close cooperation and the state governments also play a positive role in improving the infrastructure facilities, Mr Sondhi's scheme is unlikely to succeed.

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Et tu Brute

HE FREE market economy may well cry t "Et tu Brute". It has just received a uple of body-blows from two unlikely gressors, to wit, the American esta- ishment where there is still talk of the periority of the philosophy of competi- ve private enterprise and the Tory vernmant in Britain, pledged to ensure ivate enterprise a place in the sun. In e United States the third of the Big ree of the automobile industry in that untry, Chrysler Corporation, has gone the administration with a begging bowl hand. Hit by a second-quarter loss of 07 million and burdened with a heavy ventory of 80,000 cars and trucks, about 95-day dealer supply, the company's p brass has approached Congress for e billion dollars in advance tax credits, ereby raising a nationwide debate on e necessity and appropriateness of pub- funds being committed to keeping a me-duck company going on its stum- ing course to nowhere.

Chrysler is arguing that its critics are duly exaggerating the possibilities of its iling to recover its viability and that in y event its current difficulties are the rect result of having to meet the cost of vernment standards of automobile fety and pollution control. It is point- out that what is sought from the vernment is only temporary assistence improve the company's cash flow between now and the autumn of 1980 when Chrysler's new models, which are expected to restore its competitive edge, will be in the market. Those who are objecting to the bail-out have countered this plea with the criticism that Chrysler's difficulties are deep-rooted in a persistent series of management failures in manufacturing and marketing which have pushed the company so far into the red debt. It is unlikely, they say, that it will recover viability in a market where General Motors and Ford are far and away the dominant producers and which moreover is being penetrated increasingly effectively by Japanese and west European automobile manufacturers. Chrysler, it is argued, has clearly missed the bus by committing its manufacturing schedules excessively to the production of gas-guzzlers for which the market has been shrinking while failing to ensure the sufficient production of its smaller models which would have enabled it to take full advantage of the good demand for those types of vehicles.

Although there has been a rising chorus of objections both within the Congress and outside to the state making a hand-out to a corporate giant, the management of which has proved inadequate for the requirements of a free market economy, the administration has not been willing to contemplate the adverse impact on employment and business sentiment of the closure of the country's tenth largest manufacturing enterprise with sales of $13.6 billion in 1978 and defence contracts of the value of $625 million in the same year. Rather predictably, Mr G. William Miller, the secretary of the Treasury, has come forward with a compromise formula the main purpose of which, it is claimed, is to save a possible total of 400,000 jobs, including jobs at Chrysler supplier firms, which are thought to be at stake. While rejecting Chrysler's request for advance tax credit of the order of dollar one billion, Mr Miller has indicated that the government was inclined to consider bank guarantees of the order of from $500 million to $750 million which would encourage Chrysler's bankers to keep it afloat until its new small cars begin to reach the market towards the end of 1980.

This offer of assistance is subject to several conditions which collectively call for the company submitting a plan for solving its own problems, short-term and long-term involving sacrifice on the part of management, employees, shareholders, supplier firms and bankers. As a start Chrysler suspended dividend payments and contributions to employees benefit funds. An approach has been made to the United Auto Workers to freeze for two years wages and benefits payable to Chrysler employees while it is announced that top management's pay is also being frozen. About 25 per cent of Chrysler blue-collar workers are on indefinite lay-off at present with the axe threatening to fall on white-collar employees as well. Chrysler's problems are not simplified by the multi-billion dollar question it faces, viz, how to find the $8.5 billion needed for replacing its aging plant. With its share of the US market down to under 10 per cent or less than half the share of imported cars, Chrysler needs more than the marketing magic of Mr Lee Iacocca, celebrated for the wonders he had performed at Ford, whose services Chrysler engaged some time ago in an attempt at reinforcing top management.

consumer comes last

Across the Atlantic, *The Economist* (London) has been making deprecatory noises, expressing mild scorn for the easy apostasy of Mrs Thatcher's Tory government from its proclaimed commitment to a free market economy. Whitehall is blamed for looking askance at transactions designed to strengthen the monopolistic position of the Milk Marketing Board in the dairy industry. The MMB is virtually the sole buyer of liquid milk from the English and Welsh dairy farmers. Regulations blocking imports have also made it sole supplier of milk to the dairy trade as well as manufacturers of dairy products. *The Economist* caustically describes the MMB as an organisation run by dairy farmers for the interests of dairy farmers. Besides trading in liquid milk MMB is also engaged in making butter and other products in competition with other manufacturers.

What has aroused *The Economist's* ire is that the MMB's marketing status in this field is now sought to be strengthened by a deal which it has negotiated with its largest rival, Unigate. For some £87 million, the MMB will take over virtually all of Unigate's butter-making and cheese-making capacities and will thereby come to control over 60 per cent of Britain's butter capacity and 35 per cent of its cheese trade, amounting to market shares of about 25 per cent of both. *The Economist* wails that no matter which political party is in power the consumer always comes last. Mr Charan Singh may please note that he is not uniquely the farmers' friend nor necessarily even their best friend.

World food prospects

THE EARLY warning system of the Food and Agriculture Organisation of the United Nations (FAO) has reported that crop conditions are unfavourable in 31 countries—more than twice the number of countries faced with poor crop prospects a year ago. Developing countries with unfavourable crop prospects number 27.

The latest "food outlook" report of the FAO notes that the south-west monsoon has been erratic and below normal in several parts of India in its first phase. While the much needed rainfall was received in early July and again a week later in several northern states, the areas with low and erratic rainfall till lately included Andhra Pradesh and parts of West Bengal, Gujarat, Maharashtra and Uttar Pradesh. The monsoon rains had been erratic in several parts of east Asia also where rice production prospects remained uncertain.

Some improvement, however, has been noted in the 1979 wheat production outlook. Favourable weather in several wheat growing areas has led to better prospects with production expected to touch 417 million tonnes. Crop forecasts and early estimates have been revised upwards in a number of countries, including India, China, Argentina, Australia and the United States. World coarse grain production is forecast at 727 million tonnes, which is 37 million tonnes below last year's record.

Prospects in the Soviet Union are not clearly favourable and in fact indicate downward revision in the forecast of overall production. But there have been offsetting improvements in prospects in other countries particularly in the United States. The 1979 spring wheat crop in the Soviet Union could be as good as last year's crop of 51.8 million tonnes. However, maintaining present crop prospects, particularly in the more northern regions, would depend greatly on favourable late season weather. It cannot be stated with certainty that the Russian spring wheat harvest would increase the estimates of overall Soviet grain production for this year.

The US department of Agriculture expects "bearish" domestic crop production in America. The USDA has estimated the 1979 US maize production at 7,108 million bushels, soyabean production at 2,129 million bushels and wheat production at 2,132 million bushels. The figures are all above industry expectations. Favourable growing conditions across the maize and soyabean belts in the US have promoted speculative falling prices.

The FAO forecast of world wheat and coarse grain trade in 1979-80 has been raised further to 168 million tonnes, 78 million tonnes of wheat and 90 million tonnes of coarse grains, mainly reflecting larger imports forecast for the USSR. World export availabilities of wheat and coarse grains would be sufficient to meet the expected import requirements. But the crucial problem would be the exporters' shipment capabilities which are limited by the capacity of transportation and grain handing system.

rice production

In rice, the outturn of crop harvested or just being harvested appears to be better than that in 1978. The crops are said to be bigger in Australia, Latin America, Madagascar, Malaysia and Sri Lanka. Conditions for this year's early crop in China have been generally good. Growing conditions, however, had been patchy in Vietnam and poor in Bangladesh. The forecast of world rice exports last year has been raised to 10.2 million tonnes.

The FAO report has also given production prospects of cassava, milk products and oilseeds. The first indications point to a further increase in world production and export availabilities of oilseed products in 1979-80. International dairy supplies continue to substantially exceed commercial outlets. Mainly because of the massive surplus disposals in the EEC foodstuff sector, ks of skimmed milk powder have been uced and prices have risen. Buffer ks are at record levels. World cas- production is likely to increase only rginally in 1979, owing to poor crops Thailand and Brazil.

avana summit

OFFICIAL level representatives of the non-aligned nations, who have assem- l at Havana, the Cuban capital, for sixth summit, due to open on Septem- 3, failed to reach on August 29 any ision regarding the issue of the repre- tation of Kampuchea. The rival clai- nts to this seat are the Pol Pot regime the Vietnamese-backed Heng Samrin ernment. Both of them have been vassing support in their favour. They e, therefore, decided to refer the whole ter to the Foreign ministers who are tart their three-day pre-summit con- nce on August 30.

dia is likely to go along with the line representatives of neither the ousted Pot regime nor the Heng Samrin me now in control in Phnom Penh uld be seated at the conference. This the consensus that emerged at a ting of the Cabinet Committee for tical Affairs, before the External irs minister, Mr S.N. Mishra, left Havana.

nother issue that threatens to mar the mit deliberations is a Cuban draft laration implicitly suggesting that the -aligned countries should move ser towards their so-called natural es, the socialist bloc. This draft had erated considerable opposition and the bans have since submitted a second ft apparently watering down the earlier right advocacy of non-aligned move- nt's tilt towards the Soviet bloc. ypt, Yugoslavia, Algeria and some ers have tabled amendments to this ft also.

et another issue which will generate ted debate is the call of some Arab ions for the expulsion of Egypt from non-aligned movement. This propo- is likely to meet stiff opposition from many quarters and may have to be abandoned. Mr Mishra's brief is understood to be to pursue the line followed by the previous regime—the Palestinian question is the crux of the problem in the Arab-Israeli relations and must be solved amicably for a lasting and durable peace in the region.

President Tito of Yugoslavia, the sole surviving founder-member of the movement, has flown into Havana and his presence will be of crucial importance in resolving the various controversial issues. He is reported to have gathered significant support behind him from some African and Asian members of the movement.

In a statement before leaving for Havana, Mr Mishra indicated that the prime minister's pre-occupations at home have made it necessary for him to head the delegation to the summit. He said: "World peace; economic development through global cooperation; total and complete disarmament; categorical rejection of colonialism, racism and apartheid; these are India's policies and those of all non-aligned nations." He added that he would not be surprised if during the Havana summit some problems do surface. But given goodwill and mutual trust, these would be overcome. Sincere adherence to the fundamental principles of non-alignment would help these nations to evolve a common approach. "Some issues, when viewed from a distance, tend to look difficult, even forbidding. Considering the maintenance of the collective strength of the movement paramount, I have no doubt that we shall surmount all these problems. We in India appreciate that solid and unshakable unity of the non-aligned movement can be forged only by recognising, and not by denying, the dynamism, vitality and beauty of diversity", he concluded.

Sri Lanka's Tamil problem

IN AN effort to defuse Sri Lanka's racial conflict, president, Junius Jayawardene set up recently a 10-member commission to investigate the grievances of the Tamil minority. This is obviously an attempt to reach a negotiated settlement with the Tamils over their demand for autonomy. However, in setting up the commission, Mr Jayawardene has avoided any specific reference to the Tamils. Its terms of reference are to report on the devolution of resoures and decentralisation of functions among district development councils.

The commission is being chaired by Mr Victor Tennekoon, a former Chief Justice of Sri Lanka and has nominees from the opposition Liberation Front and Mr Jayawardene's United National Party as mem-

Eastern Economist 30 Years Ago

SEPTEMBER 2, 1949

UN Budget for 1950: Preliminary estimates of the UN Budget for 1950 are placed at $44,314,398. Miscellaneous income for the next year is estimated at $5,016,525 and the net expenditure at $39,297,873. Compared with the last approved budget, there has been a rise in expenditure, which is mainly due to factors such as provision for the liquidation of credits of the League of Nations, increase in the UN staff and provision for technical assistance. The provisional budget shows that a sum of $28,161,850 has been allotted for expenses relating to salaries, allowances, rents, printing and equipments. It is expected that next year the number of staff members will rise by 195 and stand at 3,192. It is noticeable that an amount of $4,312,600 has been earmarked for the UN European Office, including the Economic Commission for Europe. On the other hand, the cost of operating other regional economic commissisons is estimated at $1,086,400. A sum of $5 million has been earmarked for special commissions. The cost of the technical programme is estimated at $1,324,400. These estimates have been considered by the Advisory Committee on Administrative and Budgetary Questions. The Committee has emphasised the need of reducing the expenditure on staff and has suggested a cut of $1,786,750. Furthermore, the Committee has recommended that the activities of the Secretariat should be reviewed with a view to bringing about economy in expenditure. The report of the Committee together with the preliminary estimates will be put before the fourth session of the General Assembly.

bers. The Liberation Front has chosen Professor A.J. Wilson, who is son-in-law of Mr S.V. Vhelvanayakam, a senior Tamil politician. It has already started working and has been asked to submit its report within two months.

The ticklish problem of the country's Tamil minority has remained a thorn in the side of successive governments of the majority Sinhalese community since the country gained independence more than 30 years ago. The Tamil United Liberation Front (TULF) is demanding a separate state for the country's 1.5 million, mainly Hindu Tamil speaking people, whose traditional concentration is in the northern and eastern provinces of Sri Lanka. The Tamilians claim that they have been discriminated against in the use of their language and in public sector job opportunities, and that lands in the traditional Tamil areas are being "colonised" by Sinhalese settlers.

terrorist violence

The establishment of the presidential commission followed a steady growth of terrorist violence in the northern area around Jaffna. A state of emergency was declared in this area recently while a new and severe anti-terrorist law was rushed through the parliament.

At the forefront of terrorist activity is a clandestine group calling itself the Tamil Liberation Tigers. This group is thought to be responsible for bank robberies and several political murders throughout the north of Sri Lanka. Fifteen policemen were killed while investigating terrorist activity.

President Jayawardene observed recently that he would never permit a division of the country and that he was determined to settle the Tamil problem even if the TULF did not cooperate. The recently set-up commission, therefore, is envisaged to work out a scheme of devolution of resources and decentralised administration.

In fact, since Mr Jayawardene's government came to power in a landslide victory in mid-1977, Tamil has been restored as a national language. The government has also granted judicial and administrative independence to the northern and eastern states, where Tamilians form a majority of the population,

The Jayawardene administration has also proposed to improve relations with Tamilians through accelerated development of the area following the introduction of development councils in the island's 24 administrative districts.

Mrs Bandaranaike has claimed, however, that Mr Jayawardene's ruling United National Party is becoming increasingly authoritarian. Pointing to the recent anti-terrorist law, she has argued that powers given to the government by this act would be used not only against terrorists but also against opposing political parties.

Sweden exports for recovery

SWEDEN ENJOYS enduring trading relationships with its Scandinavian neighbours. In 1977, before its export surge last year, Norway was the largest purchaser of Swedish goods, and both Denmark and Finland were among the top five buyers of Swedish products. The benefit of Sweden's surplus balance with the three countries' products was eroded, to some extent, by its declining shares in the other markets, notably among the members of the Organisation for Economic Cooperation and Development (OECD).

Taking in view the fact that exports constitute nearly 25 per cent of its Gross National Product, the losing of the OECD manufactured goods market to the extent of 21 per cent, as happened between 1975 and 1977, was a heavy blow to Sweden. Much of this loss was attributed to rising production costs and their impact on the country's competitiveness in the world market. Wages in Sweden increased by 40 per cent between 1975 and 1976, following pay hikes in the public sector during 1975. After 1976 things changed. The kroner underwent a two-stage 16 per cent devaluation in late 1977 and early 1978. In order to regain the lost OECD markets, Sweden made special efforts in 1978 and expanded exports to that region by 2.5 per cent.

Exports to the Federal Republic of Germany were also being expanded. West Germany accounted for 14 per cent of Sweden's 1977 foreign trade, but it also was the largest import supplier for Sweden, resulting in a trade deficit with West Germany to the tune of Kr 8.5 million. Trade with West Germany involved primarily steel and chemical products. But Sweden was also selling cars in the German market, something some people thought Sweden could not do. Saab and Volvo were selling there.

Mr Ingemar Mundebo, Sweden's minister for Budget and Economic Affairs, has stated recently: "We really do not face many problems with the EEC today. In fact, there are rather low trade barriers between Sweden and the EEC. But in a hard market, sometimes, even small barriers can be a problem. More Swedish firms are moving to form daughter companies within the EEC to avoid any problems. Eight of Sweden's top ten export markets were within the EEC. In 1977 Swedish payment surpluses were recorded in trade with Denmark, France, and Italy. Balances or near-balances were recorded with the United Kingdom and the Netherlands.

west Asian market

Sweden was trying to sell more to west Asia too, where telephone sales and building activity represented the most important areas. L.M. Ericson, in consortium with Phillips and Bell-Canada, received a large order in Saudi Arabia. The government was spending Kr 11,000 million on the Swedish AXE system. Swedish firms were also building some hotels in Saudi Arabia. Of course, the country was buying a lot more oil and what was exported to west Asia could not yet balance the trade.

Mr Mundebo hopes to bring inflation under control this year within the targeted six per cent level, in order to allow free market forces a better position from which to push Sweden back on the path to recovery. Mr Mundebo stressed the need for controlling inflation in his annual budget speech also, a theme consonant with other aspects of the recent budget which did not propose any major new social reforms; proposed cuts in government financing for job programmes; and from which new taxes were notably absent.

Cover feature

Drinking water for all

The heightened importance that has come to be attached to the provision of safe drinking water, both in the urban and rural areas, during the past two years is not unwarranted. Water is not only essential for life but, if impure, it also is a health hazard. It is stressed that 80 per cent of the world's diseases can be controlled by just making available safe drinking water to people.

The attempts at making available adequate pure drinking water in India to the entire population came to be made soon after the Health Survey and Development Committee drew attention in 1964 to the woeful neglect of drinking water supply in the rural areas. It proposed an outline for a countrywide plan for the provision of drinking water in 35 years. But, regrettably, the emphasis till lately had been on catering primarily for the requirements of the urban population. For various reasons, the rural areas received a step-motherly treatment.

The Janata party, which came to power at the centre in 1977, addressed itself to the rural water supply problem in right earnest with a view to accelerating the implementation of this programme. It started giving 100 per cent grants to states and union territories to supplement their resources for the purpose. The dividends have been wholesome; a significantly larger number of villages are being made available safe drinking water annually.

The current five-year Plan envisages that all the villages that have been identified as lacking in drinking water resources should be covered by water supply schemes by 1983. Before Mr Morarji Desai's government went out of power last month, it had been indicated that efforts were envisaged to be made to accomplish this task by 1981 itself.

During the first two years of the current Plan, the budgetary allocations by the centre for the rural water supply schemes have been of the order of Rs 140 crores. The new government that will be formed after Lok Sabha election in December this year, it is hoped, will keep up the programme as the villages not having safe drinking water aggregated to as many as 100,580 on April 1, 1978, with a population of nearly 6.64 crores.

In this piece, by a correspondent, an attempt has been made to review the progress achieved so far in respect of ensuring safe drinking water supplies in the country as well as the task that lies ahead. Also presented is a global view of the problem.

A CURSORY glance at the history of civilisations would tell us that they sprang up on the banks of famous rivers. It is also an elementary fact that 65 per cent of the human body is made up of water. The body needs regular replenishment of water. This fundamental need of every person, however, is not easily met.

In our own country only about 10 per cent of the villagers have access to safe drinking water. No doubt the urban folk are better off in this respect, yet 20 per cent of the urbanites in 1,229 towns (out of 3,119 towns in the country) do not get protected water supply. Even in cities and towns where it is available, it is inadequate. Slums and suburbs of towns are very poorly served in this respect.

The preamble to every essay on Indian economics might state that eight out of ten Indians live in one of its 5,76,000 villages. Still, when the nation celebrated the silver jubilee of its Independence in 1972, barely about 36,000 villages had adequate pure drinking water. Not that the warnings of serious consequences flowing from the absence of safe drinking water facility in villages were not sounded well in time for our planners. As early as 1946, the Health Survey and Development Committee had drawn attention to the woeful neglect of rural water supply. It drew up the outlines of a plan to provide drinking water to the country's entire population in a matter of 35 years.

This was followed up by the Report of the Environmental Hygiene Committee in 1949. It noted that "an adequate supply of wholesome water by acceptable quantity and standard should be considered first among the improved health services that the community needs. But practical steps taken in this regard are very disappointing". More than ten years later the Health Survey and Planning Committee (1961) lamented that the states were ill-equipped to carry out water supply and sanitation programmes. The organisational set-up for handling the rural phase of the programme was lacking and there was multiplicity of agencies entrusted with this programme. It estimated that Rs 1,500 crores would be the minimum amount needed for both urban and rural water supply programmes.

The urban bias in housing, sanitation and water supply schemes in the various Plans and the relatively low priority accorded to rural water supply problem can be seen from Table-I.

TABLE I

Outlays on Urban and Rural Water Supply in Plans

(Rs crores)

Plan	Urban water supply	Rural water supply
I Plan	36.00	06.00
II Plan	63.00	28.00
III Plan	135.00	28.00
Annual Plans (1966-69)	39.00	21.00
IV Plan	432.00	131.00
V Plan	539.17	381.24
VI Plan	815.00	765.00
Total	2,059.17	1,360.24

It is interesting to note that safe water for villages was recognised as part of the health cover in 1954. Under this, the Health ministry took up programmes to construct piped water supply systems for groups of villages. The village water supply task was also handled by the Community Development wing, the local development works and also executed under the programmes for welfare of backward classes. This initial division of responsibility was to dog the idea for years to come. This point was mildly pointed out by the fourth Plan document.

A semblance of definite strategy to tackle the problem emerged in the fourth Plan, when it set out to assist the states to identify villages where the problem was most acute. A concept, which come to be known as 'problem villages first' evolved out of this in the next plan. It was the fourth Plan again which introduced an accelerated rural water supply programme.

The minimum needs programme component of the fifth Plan could be said to have made a departure in favour of village water supply schemes. It also laid down that the problem villages should be given priority. It defined problem villages which were known to have no source of drinking water within a mile or villages where a well could be constructed only after digging to a depth of 15 metres or more to strike water. If any of these villages had some source of water, it was a health hazard. Despite the confusion created by states in enumerating such villages, it was estimated that 1.53 lakh villages fell in the 'problem' category. The minimum needs programme alone earmarked Rs 157.87 crores for rural safe drinking water and the total outlay was envisaged at Rs 381.24 crores. The prevailing political atmosphere of concern for the neglected sections also helped in pushing the scheme ahead.

The result of 27 years of effort in this direction has been summed up with rare candour by the draft sixth Plan document thus: "Even after an expenditure of Rs 622 crores, only 6,4000 villages, covering 10 per cent of the rural population, will have safe drinking water supply facility at the commencement of the five-year Plan (1978-83)".

However, even at the beginning of the sixth Plan, the states have felt that the survey of problem villages was incomplete and there are about 1.45 lakh of them left without safe drinking water. The Plan document has called for a correct assessment so that a realistic programme can be drawn up.

The proclaimed rural bias of the Janata government, which came to power at the centre in 1977, seemed to have accelerated the water supply programme. The centre started giving 100 per cent grant to states and union territories to supplement their resources to carry out the programme. The push this gave was

Well is not well—a micro view

Sasulu village, about 70 kilometres from Bangalore in Karnataka, is in a semi-arid region. Most of its 100 inhabitants are very small farmers and agricultural labourers. The entrance to the village is marked by a water tank which tends to dry up in the summer months. An ancient well located about 50 feet away from the tank is the only source of drinking water. The villagers reluctantly admit that the Harijans and others considered low in the caste hierarchy are not expected to draw water from the well.

The public works department has built a well and a legend inscribed on its concrete wall proclaims that the well is for the use of all villagers and it would be an offence if any one is prevented from drawing water. But this new well is very near the tank and the villagers considered the water to be as pure or impure as the tank water. Those who cannot draw water from the old well quench their thirst, along with cattle, from the tank directly. The new well was lying unused but added to the statistics of villages covered under the public works programmes for the welfare of backward classes.

The village panchayat had neither the initiative nor the income to instal a well. Its annual income was about Rs 500. The rocky soil would render any attempt to tap the ground water costly. Climatic dryness and the sun were the only effective sanitation agents for the village.

It will be no consolation to the inhabitants of Sasulu that there are thousands of villages in India which share their plight.

significant. The number of problem villages covered went up from about 8,000 a year to 12,800. Of this, over 5,400 got the facility owing to the centre's financial support.

The outlays proposed for the urban and rural water supply have for the first time touched an almost equal level in the current Plan. While the draft Plan document hopes to cover all the problem villages by 1983, the Janata government had indicated that efforts would be made to provide safe drinking water to the identified problem villages by 1981. During the first two years of the Plan the budget allocation of the centre amounted to Rs 140 crores for these schemes.

The implementation of the scheme appears to be looking up. In 1978-79, the number of problem villages covered reportedly was 18,000. A similar number is expected to be covered this year. Thus, in the three years, nearly 49,000 problem villages would have access to safe water.

According to official estimates, Rs 1,062 crores would be needed to implement schemes to give safe water to all the problem villages. Of this, Rs 522 crores would have been spent by the end of the current financial year by the centre and the states. About 35 per cent or Rs 180 crores of this would be the central share.

The pace of work of providing safe drinking water to villages varies from state to state. A brief review of the performance of different states is given below.

Andhra Pradesh: Except for the deltaic region on the east, which accounts for one-third of the state's total land, Andhra Pradesh does not have adequate and assured water sources. The Rayalaseema area is well known for its drought proneness. The villages in such an area are particularly vulnerable. Out of its 63,800 villages, 15,000 are without drinking water. Water supply in the other villages is mostly met by open wells, bore wells and the panchayat water supply programmes.

Assam: The problem of finding potable water is acute in the state due to the presence of chemicals in the top layers of water. Besides, water-bearing strata in the hill areas varies from 30 to 300 feet deep. One-fourth of its about 22,000 villages did not have adequate and safe water facility (1972). The other problem relates to the low population density in the villages, which calls for a 'cluster' approach to village water schemes.

Bihar: Despite its famous floods caused by the Ganga, Gandak, Kosi and other smaller flowing furies, Bihar experienced one of the worst famines of this century in 1967. South Bihar is particularly prone to drought conditions. However, the famine of 1967 gave boost to the installation of wells with pumpsets. This has largely brought down the number of villages without adequate water. Of its 67,500 vil-

TABLE II

Problem Villages Remaining to be Covered by Safe Water Supply Schemes as on April 1, 1978

Sl.No.	State/UT	Number	Population (in lakhs)
1.	Andhra Pradesh	2,615	34.81
2.	Assam	6,700	33.81
3.	Bihar	18,050	61.10
4.	Gujarat	1,953	17.59
5.	Haryana	3,233	41.21
6.	Himachal Pradesh	10,245	17.42
7.	Jammu & Kashmir	3,191	22.78
8.	Karnataka	4,309	17.83
9.	Kerala	465	65.14
10.	Madhya Pradesh	7,297	21.41
11.	Maharashtra	3,872	64.36
12.	Manipur	1,062	4.71
13.	Meghalaya	3,185	4.72
14.	Nagaland	694	3.94
15.	Orissa	1,721	10.14
16.	Punjab	981	10.04
17.	Rajasthan	3,122	16.82
18.	Sikkim	430	1.96
19.	Tamil Nadu	1,402	20.25
20.	Tripura	2,316	6.73
21.	Uttar Pradesh	12,711	86.01
22.	West Bengal	9,036	93.25
23.	Andaman & Nicobar Islands	57	0.06
24.	Arunachal Pradesh	1,423	1.28
25.	Delhi	125	1.86
26.	Goa, Daman & Diu	73	1.92
27.	Mizoram	227	2.62
28.	Pondicherry	85	0.38
	Total	1,00,580	664.35

lages barely 10,000 can be said to be without adequate water supply. The problem has a different dimension in Bihar. According to the 1972 survey of problem villages, out of the 33,850 villages in India which were endemic to water-borne deseases like cholera, 25,000 were in this state.

Gujarat: One-third of the state has been noted as drought-prone. Except Narmada and Tapi, there are no perennial rivers in Gujarat and, it is poorly endowed in terms of water resources. As many as 3,800 of its 18,700 villages have no water sources of their own.

Haryana: It is a state known for its high irrigation facility, yet drinking water facility to 5,900 out of its 6,700 villages was not available till lately. A scheme costing Rs 138.16 crores has been taken up to provide drinking water to 3,213 villages in the scarcity belt.

Himachal Pradesh: This state receives more than adequate rain and snowfall in winter assures it of sufficient water wealth. The water needs of the people are minimised by the long wet and winter spells. However, its villages are scattered widely and have low population density. People have to treck long distances for water. About 10,200 of its 17,000 villages are in the problem category (1978).

Jammu & Kashmir: The position of water sources in the J & K state is not very different from Himachal. However, rural water supply had not made much progress, as compared to the urban programmes in the state. Out of 6,600 villages, about 1000 had access to adequate and safe water (1975).

Karnataka: Large areas in 12 out of the 19 districts in Karnataka are drought prone. The irony is that it has tracts which receive as much rainfall as Chirrapunji in Assam. However, such areas are mainly in the western Ghats. Karnataka was one of the states which had recognised very early the importance of providing safe drinking water to both urban areas and villages. Of its 27,000 villages, only a handful reportedly do not have adequate water supply.

Kerala: Nature has richly endowed the state with water supply. Despite having more than 40 big and small rivers, the river waters in big stretches mix sea water and are therefore, saline. The state had 465 problem villages in 1972. The number of villages without adequate safe water supply was negligible. The state's fifth Plan had proposed an outlay of Rs 12.47 crores to complete 82 spill-over schemes under the accelerated rural water supply scheme and for supply of water to 74 panchayats in the scarcity and difficult areas.

Madhya Pradesh: Although the state's access to water sources is very good, yet low density of population and dispersal of small villages over a wide area have rendered the problem of providing safe water to villages difficult. More than 20 per cent of its 71,000 villages were problem villages in 1972. As many as 7,297 'problem' villages were still to be provided with safe drinking water as on April 1, 1978.

Maharashtra: Area in excess of 25 per cent of Maharashtra is drought prone. Half of its 36,000 villages faced the problem of not having adequate and protected water supply in the early seventies. As late as 1978, 3,872 problem villages remained to be covered. According to a survey in 1973, in over 13,000 villages water could be provided through bore-wells and tubewells. In about 6,000 villages, water could be reached through piped supply.

Meghalaya: It shared with the other hilly areas in the north-east the peculiarity of having widely scarttered small settlements. By March, 1977, only about 25 per cent of its rural people had access to safe drinking water. The problem villages left without protected water supply numbered 3,185 in 1978.

Orissa: This state again is afflicted by the twin calamities of seasonal floods and drought conditions. It does not have an acute drinking water problem as can be seen from the fact that 1,700 villages out of a total 51,000, fell in the catergory of problem villages (1978). However, it is one of the states where water sources in rural areas are carriers of diseases like cholera.

Punjab : As the name itself sug-

Domestic water need in 2000 AD

The population of India in 1971 was 547 million. By 2000 A.D. it is expected to go up to 945million, according to the National Commission on Agriculture. Of this, 278 million would be in urban areas.

The livestock population in 1972 was 496 million (including fowl) and by 2000 A.D. it would reach 622 million. Based on these assumptions, a paper presented to the World Congress on Water Resources, held in 1975, has summed up the domestic water requirement thus:

DOMESTIC AND LIVESTOCK WATER REQUIREMENTS

(million hectare metres)

	1974	2000
(i) Rural	0.47	1.20
(ii) Urban	0.41	1.46
(iii) Livestock	0.42	0.74
	1.30	3.40

gests, access to water sources is no problem in this state. In terms of irrigation facility, it is at the top of the all-India table. A little less than 1,000 problem villages were yet to be covered by rural water supply schemes in 1978. However, more than 20 per cent of the village population faced the problem of inadequate drinking water.

Rajasthan: The state receives the lowest average rainfall in the country. It also accounts for the largest drought prone area among all the states. Land in excess of 30 per cent of the state's area is drought prone. For striking ground water one has to go to a minimum depth of 40 feet and a maximum of 200 feet. Out of the 33,300 villages in the state, 24,000 (more than two-thirds) were problem villages. Over 10,000 had to depend upon accumulation of rain water and in 13,600 villages the water was unfit for human consumption. Excessive salinity of water and the presence of water borne diseases are the other problems faced by rural Rajasthan. In 1978 it was estimated that the number of problem villages uncovered by any rural water supply schemes was 3,122 with a population of about 17 lakhs.

Tamil Nadu: Like Punjab and Haryana in the north, Tamil Nadu in the south leads in irrigation schemes. It may come as a surprise to note that in the early 1970s, the state received sizeable sums from the centre for its drought relief operations; 25 per cent of the state's area is drought prone. Out of the 58,600 villages in the state, 17,000 had been identified as problem villages and in 2,230 villages the water available posed a health hazard. Frequent droughts have alerted the state government to take up rural drinking water programmes on a large scale. Between 1971 and 1977, an expenditure of Rs 22.24 crores was incurred on bringing drinking water to 16,100 villages. In 1978, it was estimated, that 1,400 problem villages were uncovered by rural water supply schemes.

Uttar Pradesh: Like its neighbour Bihar, Uttar Pradesh has ample water sources. Yet 30 per cent of its 112,000 villages had acute drinking water problem in 1972. The eastern parts of the state and about 8,000 villages in the hilly areas suffered from water shortage. The 1972 survey of problem villages identified 14,200 UP. villages, the largest concentration in a single state. As late as 1978, 12,700 problem villages were outside the scope of rural water supply schemes. The fifth Plan was able to provide water to 5,050 problem villages. The organisation for implementing rural water supply programme was reorganised in 1975. An apex Jal Nigam (Corporation) was established, along with three regional Jal Sansthans at Kumaun, Garhwal and 'Bundelkhand. Five other Jal Sansthans were set up at Kanpur, Agra, Varansi, Allahabad and Lucknow.

West Bengal: Like Kerala, West Bengal is also a land of rivers and rivulets. However, scanty rainfall and difficult sub-soil strata in Purulia, Malda, West Dinajpur, Burdwan and 24-Paraganas render them drought prone. The number of villages with arrangements for drinking water was as low as 20,500 out of 55,000 villages. The estimates committee of the state legislature observed recently in a report that the transactions of government business relating to rural water supply are all wonky. The committee also found that piped water supply was unsuitable and very costly; whereas the per capita cost of piped water supply came to Rs 200, the same cost for a spot-well was Rs 10.

The approach of the state is to provide one safe watet source for every 300 people. The number of uncovered problem villages in 1978 was 9036.

Multi-dimensional problem

AN EXPERT on water resources of India, Dr K.L. Rao, has estimated that the needs of domestic water consumption in both the urban and rural areas would amount to barely two per cent of the total surface flows in the river systems of India.

The quantum of water for domestic requirements varies vastly from country to country and region to region. The climatic variations, social customs and habits and, values of hygiene are some of the factors relevant in determining the water needs of humans. However, irrespective of these factors, the domestic water consumption of the urban sector seems to be greater than in the villages. In towns and cities the norm for provision of water is placed between 25 to 45 litres per day per capita, as against the norm of 10 to 15 litres per capita per day in rural areas. The water for cattle and other domestic needs are exclusive of this. Generally 60 litres of water for domestic animals is taken as the norm. Taking these factors into account, the estimate places the quantum of water used for domestic purposes at 3.6 per cent of the total water used for various purposes, such as industrial, commercial, power, farming, etc.

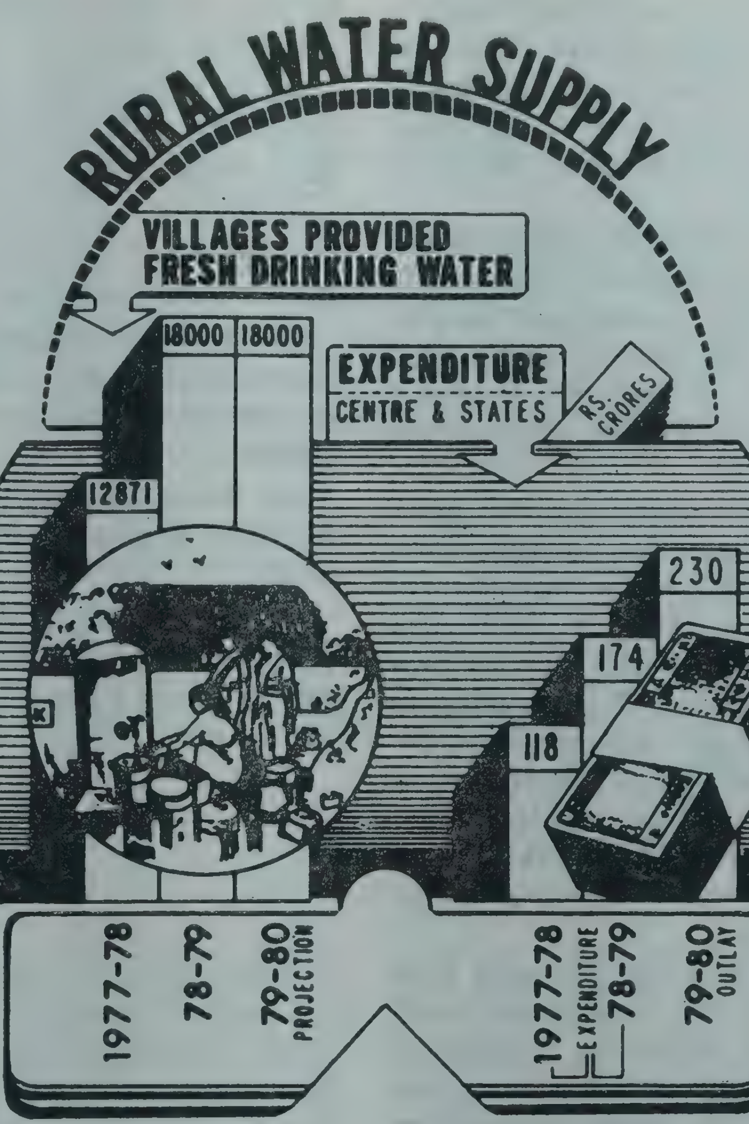
In making use of the precious water resource, which is neither inexhaustible nor evenly distributed, the first priority should have been to make available drinking water to human beings and cattle but this has not been the case. Health experts have repeatedly drawn attention to the hazards to health posed by water-borne diseases. It is seriously stated that 80 per cent of the world's diseases can be controlled by just making available safe drinking water to the people. The UNICEF has warned that diarrhoea, a water borne disease, alone claims 8.7 per cent of the total deaths of children in the age group of 0-1; 19.1 per cent of the deaths among children between 1-4; and 15 per cent of deaths between 5-15. As many as 160 million out of 203 million children do not have the facility of safe water. The cost in terms of damage to the nation's human resource can be gauged from this.

The initial efforts to provide water to villagers were not only made spasmodically but the strategies advocated were adopted from urban water supply systems. Piped water supply was introduced in some of the villages but soon problems cropped up. Villages where piped water was introduced did not have the finances and the technical support to operate and maintain the system.

The design of the water supply scheme per force has to take into account local factors such as the area, the socio-economic and knowledge levels of the beneficiaries, availability of water source and the cost determinant. Social factors like the caste also become relevant in the rural scene.

One of the major constraints in implementing the scheme was the poor finances of village organisations. Earlier attempts to reach water facility in isolation of other development schemes, primarily as a welfare measure, failed to evoke the villagers' response. Perhaps realisation of this has been responsible for including the rural water supply in the minimum needs package in the fifth Plan.

The low level of community awareness concerning environmental pollution has also compounded the official apathy towards rural water supply programmes. Another effect of this has been the impracticability of schemes to prescribe elaborate water treatment procedures. Even simple suggestions like the desirability of drinking boiled water become irrelevant in villages. These aspects compel the adoption of fool-proof schemes to give safe water to villagers, in spite of the higher costs of such schemes.



Motivating the villagers to consume safe water would, therefore, become a necessary groundwork. Educating them in environmental sanitation would bring about their participation in the programme and in turn ensure proper maintenance of the water supply system. The UNICEF has been laying great stress on this aspect of the programme.

So far water supply has not been developed on commercial lines. Even in cities and towns, the water and sanitation work draws considerable governmental finances and the users pay a nominal charge. As they are not self-financed, expansion of facilities becomes difficult. The UN conference on water has floated the idea of a revolving fund for funding water supply schemes. Such an idea can develop only when the users are made to pay a realistic charge for the service. However, in the poverty-ridden villages water supply cannot be developed on commercial lines. Perhaps, a cess on urban users may be imposed so that part of it can go to fund rural schemes and a portion tucked away as reserve fund for future expansion of the urban schemes. But such a suggestion has little chance of finding political backing.

A welcome sign is the setting up of water supply and sanitation bodies by several state governments to tackle the problem. At least they would lobby for running these services on commercial lines and their efforts might succeed one day. One can also hope that these autonomous bodies would endeavour to assess the problem in depth and devise strategies suited to different areas. In Uttar Pradesh separate bodies to handle the problem in the hill areas and in towns have been set up under an apex body which has set the trend in this regard.

Sanitation schemes such as construction of drainage and sewage disposal in villages has to go hand in hand with the water supply programmes. So far concrete evidence of the two meeting in villages has not emerged.

The entry of electricity into more and more villages can be expected to make an impact on the pace of rural water supply. On this front also prospects are not bright for the present. As many as 3.49 lakh villagers are yet to receive power. Since the imperatives of higher farm output can be expected to accelerate the pace of rural electrification, rural water supply also would get a powerful ally.

For the first time, the sixth Plan has brought the outlay on rural water supply nearer to the level of expenditure on urban water supply. This trend would continue in the future Plans as well. Of course, this will depend upon the manner in which the sums are utilised in the current Plan. The coming decade is being observed as an international decade of water supply and sanitation. One cannot at this stage say what would be its real impact on the villages. If nothing else, its psychological impact on policy makers would be beneficial and all those concerned with the implementation of rural water supply should take advantage of these favourable trends. Several vital steps need to be taken by them, if they plan to seize this opportunity. These steps relate to:

(a) Efforts to prepare a correct estimate of problem villages.

(b) Location of reliable water sources.

(c) To make provision for storage of water.

(d) To evolve designs of water supply schemes suited to each area, keeping the local resources and cost effectiveness in view.

(e) To assess water needs of the livestock and dovetail them into the rural water supply schemes.

(f) Prepare and execute a long-term plan to educate the people in hygiene and sanitation.

(g) Carry out training programmes to train village level technicians to operate and maintain water supply systems.

(h) Simultaneously evolve plans for rural drainage and sewage disposal.

It has been estimated that Rs 7,000 crores would be needed to provide safe drinking water to all villages in the country.

Funding an investment of this order might be difficult, but it is worth making it as soon as possible. The cost-benefit analysis of such an investment comes out clearly in a survey of incidence of water-borne diseases undertaken in some villages of UP. According to the UNICEF, after the introduction of water works sanitation, the death rate from cholera decreased by 74.1 per cent, that from diarrhorea by 42.7 per cent, by 23.1 per cent in the case of dysentry and by 63.6 per cent in typhoid cases.

Looking at it from another angle, it has been stated that we can eliminate some of the deadly diseases that afflict three-fourths of our children for the same price that they otherwise will have extracted from society during the next decade.

A global view

A World Health Organisation survey had estimated that by the end of 1970, the rural population of the developing countries amounted to 72 per cent of their total population of these countries. Of this, rural population of 1.08 billion, or 86 per cent of the total was without "reasonable access to safe water". Considered by region, the need was greatest in south-east Asia where 91 per cent of the rural population lacked an adequate supply, followed by Africa (89 per cent) and the American region (76 per cent).

The World Health Assembly in 1972 set a new target of 25 per cent of the rural population to have reasonable access to safe water by 1980. To reach this target, 241 million people (which is in excess of the total population of the USA) must be provided with water supply by 1980. Even if this is achieved, which seems unlikely, the present water development will still not keep pace with population growth in the rural areas of developing countries. If by 1980 the number of people without an adequate water supply is to be equal to the number in that position in 1971 (i.e. 1.08 billion), then 297 million people will have to be supplied safe drinking water by 1980. In other words, merely to keep the number unserved constant, it is necessary to provide water for a population equal to over five times that of the UK by 1980.

A World Bank paper has estimated that even to fulfil the modest goal of providing safe drinking water to a quarter of the rural population would entail an investment of US $3000 million.

It has identified the weaknesses of the rural water supply schemes as follows:

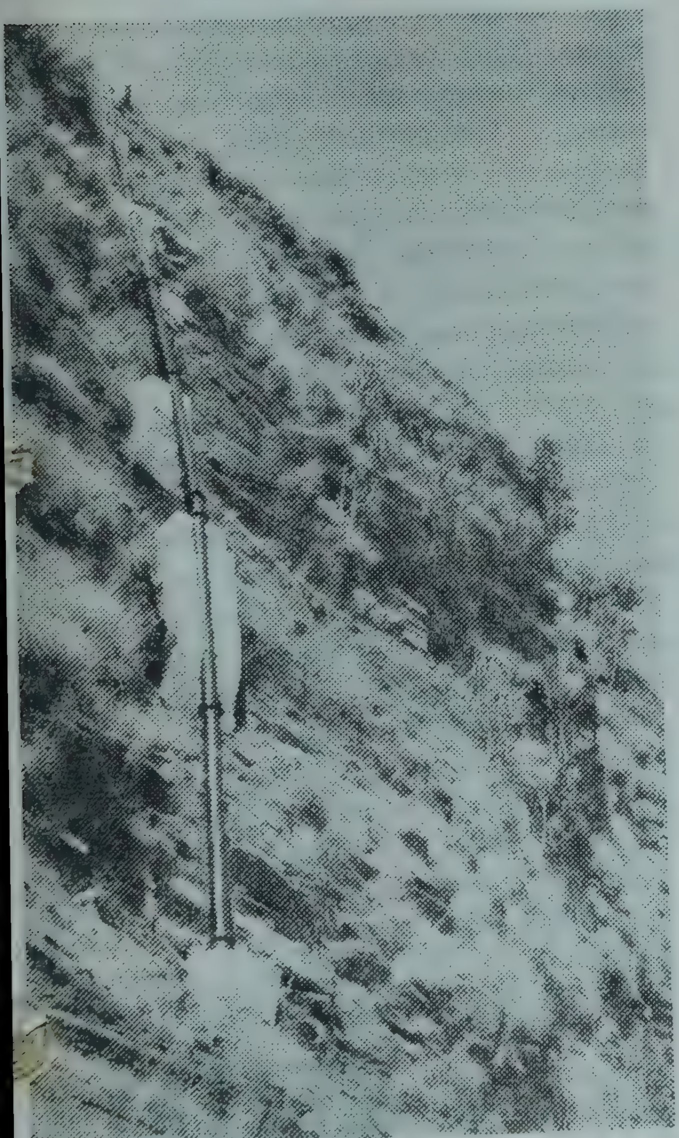
1. Lack of government rural water supply policies.
2. Undefined or overlapping responsibilities of numerous agencies.
3. Institutional weaknesses at all levels.
4. Lack of trained man-power at all levels.
5. Low village incomes.
6. Failure to collect adequate charges from water users, due

either to want of financial policies or to ineffective collection machinery.

7. Lack of public health education.
8. Frequent failures in water supply systems due to poor operation and maintenance procedures or lack of spare parts.
9. Difficulties in communication between widely dispersed rural systems and their support agencies.

A conference on water was convened under the aegis of the United Nations in 1977 in Argentina (at Mar del Plata). It gave the call to observe the 1980s as 'The International Drinking Water Supply and Sanitation Decade'. The effort should be directed not only to spread awareness about the shortage of drinking water but also to draw up schemes to reach new targets in the implementation of water supply schemes.

The World Health Assembly in 1972 set a new target of 25 per cent of the rural population to have reasonable access to safe water by 1980. To reach this target, 241 million people (which is in excess of the total population of the USA) must be provided with water supply by 1980. Even if this is achieved, which seems unlikely, the present water development will still not keep pace with population growth in the rural areas of developing countries. If by 1980 the number of people without an adequate water supply is to be equal to the number in that position in 1971 (i.e. 1.08 billion), then 297 million people will have to be supplied safe drinking water by 1980. In other words, merely to keep the number unserved constant, it is necessary to provide water for a population equal to over five times that of the UK by 1980.



The conference has set the ambitious target of providing assured, protected water supply to the entire global population by the turn of this century. This will need enormous drive, organisation and a minimum of US $65 billion at 1977 cost estimates. But these cost estimates have little relevance in these days of galloping inflation. For instance, $30 billion was considered in 1970 as adequate to provide drinking water to all villages, but current estimates would place the financial needs at double that figure.

The conference highlighted the urban bias by pointing out that three-fourths of the available resources were spent on urban water schemes, benefiting 70 per cent of the urban people in developing countries. Against this, only 15 per cent of the rural population in these countries had access to safe drinking water.

The Argentina conference made a significant contribution by focussing attention on the unsuitability of methods of urban water supply in the rural context. It called for initiating feasibility studies to find out schemes appropriate to local conditions. The requirement of trained manpower to implement, operate and maintain the rural water supply schemes so evolved was also stressed. An elaborate plan to educate rural communities in domestic and community hygiene and the need of involving them in the planning, construction, operation and maintenance of water supply projects and in the prevention of water pollution was also suggested.

The idea of creating a national revolving fund to finance water supply and sanitation programmes, founded by national and foreign sources, was also mooted. The motive behind the idea was to mobilise the requisite resources and the participation of beneficiaries.

The United Nations Children's Emergency Fund (UNICEF) has been providing aid in the shape of drilling rigs, accessories, and spares for tapping ground water sources in hard rock areas. Its interest in protecting children against water borne diseases such as cholera, diarrhoea and other diseases has pushed UNICEF to the aid of rural water supply programmes. Besides developing a sturdy pump for use in the villages, it has sponsored training for village level technicians who will be called upon to maintain the pumpsets. At the same time it has taken up education of communities in health and hygiene. It has allocated $5.7 million as assistance to rural water supply programmes.

The World Health Organisation has given assistance by way of supplies of equipment and fellowships. Its main concern has been in the field of environmental pollution control and water supply.

MOVING FINGER

The day the president, metaphorically speaking, went laughing all the way to Lok Sabha, a friend, who had just returned from 12, Willingdon Crescent, rang me up not much later than 11 a.m. and told me that he had heard that Lok Sabha was going to be dissolved preparatory to a mid-term poll and that the Charan Singh-Chavan ministry would be asked to remain in office as a caretaker government. He also said that the relevant presidential order was expected to be issued around two in the afternoon. Expressing my surprise and doubt, I pointed out that, since the Janata party had sent an SOS delegation to Madras only that morning to meet the Tamil Nadu chief minister and enlist his party's support for the formation of a government by Mr Jagjivan Ram, the president would at least wait for the results of this mission. In the event, my informant proved right, which is some more evidence that Mr Sanjiva Reddy had made up his mind quite early on that fateful day.

Meanwhile, the Janata party leadership has been talking of a move to initiate in Rajya Sabha impeachment proceedings against the president. Although Mr Chandra Shekhar seems to be strongly in favour of such a step, his enthusiasm does not seem to be widely shared in the party. The argument seems to be that the president's attitudes or activities during the political crisis should be made an election issue and the people asked to give their verdict. It is also being pleaded that the most serious business before the Janata party is the election campaign on which it must now concentrate all its energies and efforts.

Quite a few Janata leaders, moreover, are objective enough to point out that the party president and other Janata stalwarts seem to be not a little confused over the precise nature of the indictment they want to draw up against the president. If the charge is that Mr Reddy has conducted himself as a political activist beyond the limits set for a constitutional president, it is asked how it is proper for Mr Chandra Shekhar to insist, as he has been doing, on the president intervening in such matters as the composition of the government delegation to the Havana summit. The Congress(I) party is also committing a similar blunder by trying to tempt the president into overseeing the day-to-day affairs of government. Mr C.M. Stephen, for instance, is reported to have recommended to Mr Reddy that he should keep a close watch over the caretaker ministry so that it may not misuse its position during the run to the mid-term poll. Simultaneously, the irrepressible Mr Raj Narain is running to the president with allegations against Mr Kanti Desai and charges of curruption in high places with regard to the Jaguar deal. Thus all political parties seem determined to drag the office of the president into the affairs of administration even while some of the political leaders are complaining that Mr Reddy is trying to usurp authority which is not his under our constitution.

Mr C. Subramaniam, who will no doubt be a candidate in the mid-term poll, is making speeches about the high importance of ensuring that elections are fought without the benefit of black money. He has in fact been publicly expressing for some time now his anguish over the perjury committed by candidates in the elections when they submit false expense reports as a matter of course. The cooperation of the business community is of course absolutely necessary for keeping elections clean. But, then, businessmen are firm believers in investing for commercial profit or personal security.

To be honest or dishonest, however, is after all very much within the choice of the individual. For instance, when Mr Madhu Dandavate ceased to be minister recently, one of his first acts was to file a statement of his assets and liabilities with the president, the prime minister, the leader of the opposition, JP and Acharya Kripalani. If Mr C. Subramaniam really desires clean elections it should not be difficult for him to make his own voluntary contribution to this objective by refraining from soliciting or accepting donations of black money. If a sufficient number of candidates show themselves capable of following this straight and narrow path, a suitable climate will be created for clean elections.

I had always encouraged my children to be free thinkers in matters of religion and when two of them turned out to be agnostics I was rather pleased. However, their non-faith seems to have wavered when I fell critically ill recently. One of them, the eldest of my three sons, weakened to the extent of inviting his two brothers to join him in a prayer for the life of their father. The other, the eldest of my two daughters, wrote from Toronto that for the first time in her adult life she addressed a wish to god, "wherever she is" (this daughter is an earnest feminist), the wish being that her father should survive. My own atheism (being superior to mere agnosticism) successfully stood the test. As I was being wheeled into the operation theatre for a second time within a fortnight, some one, well-intentioned but misguided, bent down and whispered into my ears that I should pray to god. Drugged as I was, I still had the wit to retort "Why should I? God has no prostate". Those could very well have been my famous last words, but they were not. They merely made the grade as a piece of witticism that could raise a chuckle from the nurses who ministered to me on my sick-bed.

VB

Enlightened exporting community

R. Jayapal

Except for marginal surpluses in two years, 1972-73 and 1977-78, external trade of the country has been showing an adverse balance. The recent happenings in Iran and the momentum gained by the Islamic concept should warn us of the possibility of reversal of the current comfortable exchange reserve position. The author urges that the Indian exporter should go about his job in a methodical way and export promotion organisations should discourage novices from venturing into export trade whose efforts fizzle into nothing and only bring a bad name to the country.

For a developing country such as India it has now become all the more important that its export trade should be on an expanding and enduring basis in the light of the growing demand of the masses for importable essential commodities and the compulsive need to develop the muscles of Indian industry with the kind of sophisticated technology and expertise available in the developed parts of the world. The possibility of India losing its preeminent position among the developing countries and stumbling also to an abrupt halt in the midst of its dedicated march towards industrial and economic advancement cannot be discounted if the importance of strengthening our export trade is not immediately recognised.

Excepting for marginal surpluses on two occasions in 1972-73 and 1977-78, external trade of the country has always been showing an adverse balance. And, the year 1978-79 has ended up with a none-too-small deficit of Rs 1,072.90 crores. Nevertheless, the gross imbalance in the external trade has not been acutely felt mainly because of bulging foreign exchange reserves. The recent happenings in Iran might have, in all probability, sent a ripple through the Gulf and recurrence of a similar situation elsewhere will not be ruled out now that the Islamic concept is gaining momentum. This may eventually result in an unprecedented reversal of today's comfortable exchange reserve position since a large portion of inward remittances from non-resident Indians is from west Asia.

Non-traditional goods such as engineering, gem and jewellery, textiles, leather manufactures, chemicals, etc, with their growing potential for realising higher unit-value, have become the major dominants of our export trade. In fact, out of the all India exports of Rs 5691.5 crores in 1978-79, the share of engineering and gem and jewellery alone was about Rs 1,385 crores (Rs 685 crores and Rs 700 crores, respectively). Engineering tops the list as foreign exchange earner as the import content of the gem and jewellery exports will be around Rs 450 crores. The government is not, of course, unmindful of the necessity to give preference to increase the exports of non-traditional goods. The relaxation of import-export policy with autarkic view in mind, extension of various export incentives, and supply of raw materials on priority basis for export production are some of the salutary steps taken to provide the necessary filip to boost the country's exports. However, without the active participation of an enlightened exporting community to take advantage of the growing prospects for Indian good and services abroad and make use of the benefits provided by the government, the much desired stability and growth in our exports will be a far cry.

Don Quixotes

It appears that nearly two-thirds of the exporting community turn out to be no more than the Don Quixotes with some exportable products or the other. Driven sheerly by the word-of-mouth publicity about the fantastic results attending the efforts of a section of exporters, the newcomers jump into this field with untenable aspirations. Sooner than later this vivacious group finds out that their efforts were nothing but an exhaustive exercise inflicting an irreparable dent on their finance. Some others, exposed only latterly to the conundrums of export trade, chafe under unexpected set-backs and have second thoughts on continuing the export business. Therefore, export promotion organisations, of whatever hue they may be, cannot afford to let such an adverse trend to crop up especially at a time when hey have set their sights on reaching ew heights in promoting sales of Indian oods abroad. In effect, confining their ctivities to the attainment of the tagets ixed, they unwittingly subserve the interests of high sounding names in export usiness. The new-comers, mostly SSI nits, which need the assistance of the EPOs at each and every stage of their xport business, after some initial semblance of support by the latter, are left to end for themselves and come up on their wn. This, of course, is a tall order for he SSI units and finally leads to generation of various types of complaints. ranging from defective supplies to late deliveries. The EPOs will, therefore, have to ealign their strategies and come up with effective promotional methods conducive to improving the standard and rowth of exports from the small scale ector who are large in numbers.

The first and the most important step must be 'determination of objective'. If businessmen think that they can land a ig catch in a foreign market simply by asting the net a bit wide, they will not nly lose their face but also damage the reputation of other Indian exporters beyond repair. When an aspiring businessman walks into an EPO office and says he wants to export, instead of giving him the usual pep talk, it would be better if he is straightaway told of the vicissitudes of export business. This would check the euphoria his type usually carries. He should also be asked why need he export. What kind of product he intends exporting. Does he have enough capacity to enter into export trade ? Is the quality good and the price comparable with those of others in the line ? These incisive questions will certainly help a new entrant arrive at an objective, and by the same token, nip those with different ideas in the bud.

Next it comes to identification of the buyer and the export product. An in-depth assessment will become necessary as to who will be the prospective buyer for a particular product. What will be his requirements. If any modifications are needed in the design or quality of the product to make it acceptable. Whether competitive price could be offered. EPOs who do not have foreign offices of their own may resort to the commercial section of the Indian high commission/embassies abroad to collect feed-back information of this kind. A thorough analysis of the capacity and standing of the buyer and the demand for the export product will make an exporter know whether he can go ahead with the idea of entering into exports.

The third and the one that deserves serious consideration is the method of approach. It should be aimed at creating an interest in the importer. In a highly competitive international market an importer is certain to be flooded with a plethora of offers, quotations and introductory letters from all corners of the globe. If an introductory offer of an Indian exporter is to draw any attention amidst this huge pile, it should very well merit it. Care should, however, be taken to resist the temptation to spend lavishly on glossy literature, catalogues and price-lists. The catalogues and pricelists can be printed attractively in a simple way giving maximum information, in brief. Specialists in the service of the International Trade Centre, Geneva, are actually

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Spun Pipe Section	Bansberia, Dist : Hooghly.
Cement Section	Basantnagar, Dist. : Karimnagar (A.P.)
Refractory Section	Kulti, Dist : Burdwan.

effect in their publications for the benefit of exporters in less developed countries. The export promotion organisations which have the privilege of direct contact with the ITC will have to unhesitatingly assist the new-comers with fresh workable ideas.

Close on the heels come submission of quotation and samples, execution of orders, negotiation of documents for payment and preference of application with the government for incentives. The expert advice of EPOs, and to some extent personal advice, to an incipient exporter in these spheres of export business is as essential as it is for them to achieve their ambitious targets. Once a fledgling knows how it is in export trade, what to expect and how to take preventive measures to ward off problems, after two or three exports, then he is on his own. Time may even come when he will be invited to share his experience with others.

The step-by-step guidance of the kind indicated may sound too personalised than the services the EPOs have been discharging hitherto. A fresh departure from the run-of-the-mill-kind services indubitably calls for a reasonably broad reorganisation of the administration of EPOs to some extent with additional need for devoted and highly experienced personnel as well as working finance. The government can afford to take an enthusiastic view of the initiatives of the EPOs and strengthen their hands. It is, however, incumbent on the EPOs to launch a coordinated action plan taking into confidence exporters, both newcomers and established ones, to achieve greater efficiency in their performance.

Estimates of production functions in Jammu & Kashmir agriculture

Nisar Ali

The author who is lecturer in the post-graduate department of Economics, University of Kashmir, Srinagar, has made an attempt at assessing and evaluating the crop production parameters in the state of Jammu and Kashmir and come out against mass orchardisation in order to achieve regional self-reliance. His analysis advocates a thrust towards restructuring the basic input-output matrix to overcome the local supply gap. He believes reallocation of resources with capital intensity bias will promote growth and employment potential in the agricultural sector in the state.

FARMING IS the major occupation supporting about 81[1] per cent of working force in the Jammu and Kashmir state. The average size of operational holding being very small, 2.31 acres, on the one hand, and rapid growth of marginal and submarginal holdings coupled with fast growing commercialisation (orchardisation) with high land concentration ratio,[2] on the other, are the apparent features of the state agricultural economy. Although there is a lack of capital intensity on cereal farms and consequent non-existence of technical breakthrough on a macro scale, yet a quasi-breakthrough in certain areas is reflected by the massive use of high-yielding varieties of seeds—in fact, virtually the only modern factor of production. Although much of the empirical work on Indian agriculture during the last several decades is focussed on the estimation of production functions and returns to scale parameters, yet no such exercise worth the name has been done on the state agriculture to work out the said parameters. This article is a part of a broad-based model;[3] of course, the first exercise of its kind on Jammu and Kashmir agriculture. It attempts to assess and evaluate the crop production parameters in the state.

Data Analysis: While one tries to embark upon any exercise on the state economy, one is confronted with many tedious problems peculiar to this region owing to its topographical factors unlike other parts of the country, the most pronounced and pressing being the non-availability of statistical data. Neither has any farm management study been conducted so far nor are even the economy's basic parameters known. Some broad-based and highly aggregative statistical data are made available by the Directorate of Statistics and Evaluation, but one cannot build any useful model on the same for important policy conclusions. However, recently state income data have been rationalised in the light of 'Standard Statistical Methodology' issued by the Central Statistical Organisation (CSO) to the states. One can make use of the said data to work out the crucial parameters of the economy. This article deals with agriculture proper and does not include livestock, hunting and trapping, which all together constitute the agricultural sector. We are using here the data as provided in Table I on the following variables:

Gross value of crop output: The gross value of crop output has been obtained as product of the outturn and the price in respect of those agricultural commodities for which prices and outturn are available. In respect of other commodities for which outturn is not available, gross value has been estimated by making use of the estimates of gross value per unit of area sown. The output of by-products has also been estimated.[4] This has been divided by the area under crops to arrive at gross value of crop output per hectare basis.

Cropped area: It is the area under crops for which the study has been made, including the area under orchards and other commercial crops. Since the time series data on the average holding size is not available, it has been transformed into index for estimation purposes.

Farm labour: On the basis of rural population provided in census 1961 and 1971, the annual growth rate between 1961 and 1971 works out to be 2.69 per cent per annum. The rural population has been projected with the base 1961 up to 1971 and extrapolated for the trend up to

1976, assuming the same growth rate during the post-1971 Census period. The rural population is used as proxy for farm labour in view of the fact that agriculture is the predominant activity in rural areas.

Capital input: Capital is agglomeration of the value of seed, organic fertilisers, irrigation charges, electricity, pesticides, maintenance and other operational expenditure.[5] These have been estimated on the basis of the data made available by the CSO.

Estimation of zero-order correlation matrices revealed a high degree of multicolinearity between the explanatory input variables (see Appendix). To overcome the problem of multicolinearity, the data were transformed into a new set by dividing the original data by the cropped area and thus converted them to per hectare basis. The criteria that all the sample correlation coefficients were less than the overall degree of multiple correlation[6] have been satisfied.

Specification of model: Production function analysis, with different specifications is used as an analytical tool to estimate the basic parameters in agricultural sector. The estimates are based on fitting the usual Cobb-Douglas production function which take different shapes.

$$\frac{Y}{Ac}=\alpha\frac{X_2}{Ac}^{\mu}\ldots\ldots(1)$$

$$\frac{Y}{Ac}=\alpha\frac{X_2}{Ac}^{\gamma}\frac{X_3}{Ac}^{\eta}\mu\ldots\ldots(2)$$

$$\frac{Y}{Ac}=\alpha X_1^{\beta}\frac{X_3}{Ac}^{\eta}\mu\ldots\ldots(3)$$

$$\frac{Y}{Ac}=\alpha X_1^{\beta}\frac{X_2}{Ac}^{\gamma}\frac{X_3}{Ac}^{\eta}\mu\ldots\ldots(4)$$

The reduction of the above Cobb-Douglas production function specifications to the log linear form for the purpose of estimation yields:

$$\text{Log}\frac{Y}{Ac}=\text{Log}\,\alpha+\gamma\,\text{Log}\frac{X_2}{Ac}+\mu\ldots\ldots(1)$$

$$\text{Log}\frac{Y}{Ac}=\text{Log}\,\alpha+\gamma\,\text{Log}\frac{X_2}{Ac}+\eta\,\text{Log}\frac{X_3}{Ac}+\mu\ldots\ldots(2)$$

$$\text{Log}\frac{Y}{Ac}=\text{Log}\,\alpha+\beta\,\text{Log}\,X_1+\eta\,\text{Log}\frac{X_3}{Ac}+\mu\ldots\ldots(3)$$

$$\text{Log}\frac{Y}{Ac}=\text{Log}\,\alpha+\beta\,\text{Log}\,X_1+\gamma\,\text{Log}\frac{X_2}{Ac}+\eta\,\text{Log}\frac{X_3}{Ac}+\mu\ldots\ldots(4)$$

where,

Y=Gross annual value (Rs) of agricultural output.

X_1=Index of total cropped area including area under orchards.

X_2=Rural population (in lakhs) used as proxy for farm labour

X_3=Annual capital expenditure (Rs) consisting of value of seed, organic fertiliser, irrigation charges, electricity, pesticides, maintenance and other operational expenditure.

Ac=Area under crops (lakh hectares).

α=Constant intercept.

β=Elasticity coefficient of land.

γ=Elasticity coefficient of labour.

η=Elasticity coefficient of capital.

μ=Random disturbance factor.

The regression coefficients of Cobb-Douglas type of equation indicate the elasticities of production of inputs and the sum of these elasticities indicates the nature of returns to scale. These elasticities indicate the change in output if an input is increased by one per cent. The multiple regression coefficients reveal the influence of different inputs, viz, land, labour and capital on the gross value of

TABLE I

Agricultural Production and Related Inputs in Jammu and Kashmir (1960-61 to 1975-76)

Year	Gross value of crop output (lakh Rs)	Gross value of crop output per hectare (Rs)	Cropped area (lakh hectares)	Crop area Index	Rural population (lakhs)	Farm labour (Nos per/ha)	Capital (lakh Rs)	Capital Rs (per hectare)
1960-61	5501.46	676.60	8.131	100.00	29.68	3.65	303.24	7.90
1961-62	5583.68	692.25	8.066	99.20	30.37	3.76	311.03	8.61
1962-63	5732.79	688.71	8.324	102.40	31.05	3.73	329.85	9.16
1963-64	6177.88	733.54	8.422	103.58	31.74	3.77	340.79	8.77
1964-65	7182.58	910.69	7.887	97.23	32.43	4.11	373.58	10.32
1965-66	6522.48	843.46	7.733	95.28	33.12	4.28	405.11	11.76
1966-67	9454.90	1269.11	7.450	91.62	33.81	4.54	507.41	13.20
1967-68	10617.09	1272.27	8.345	103.63	34.50	4.13	667.60	12.79
1968-69	10043.72	1099.72	9.133	113.07	35.18	3.85	623.30	12.41
1969-70	11475.66	1285.36	8.428	110.83	35.87	4.02	571.22	14.18
1970-71	12235.32	1354.47	8.295	103.74	37.58	4.53	623.70	14.05
1971-72	12241.02	1410.26	8.680	108.38	38.27	4.41	613.90	18.25
1972-73	12959.76	1454.52	8.910	111.03	38.96	4.37	697.86	18.00
1973-74	16419.19	1798.42	8.130	113.50	39.65	4.34	848.96	17.87
1974-75	19968.08	2045.91	9.760	120.40	40.34	4.18	783.36	17.05
1975-76	20987.82	2111.45	9.940	122.24	41.02	4.13	1218.48	17.63

the crop output per hectare. These are presented in Table II.

Since we are using OLS method, we have minimised the sum of squared deviations between the observed values and computed values from multiple regression. The same is expressed by standard errors of our regression coefficients when divided by degrees of freedom and taking its root, since it is desired that the estimates be unbiased and have minimum variance.[7]

$$SSD = \sum_{i=1}^{n} (Y_j - \overline{Y}_i)^2$$

$$SE = \sqrt{\frac{\sum_{i=1}^{n} (Y_j - \overline{Y}_i)^2}{N-1}}$$

Further, in order to have more reliable coefficients of regression, the coefficient of multiple determination has been worked out which is given by

$$R^2 = \sum_{i=1}^{n} \frac{Y_j - (Y_j - \bar{Y}_i)^2}{y_j^2}$$

where, $Y_j^2 = (y_j - \bar{y})^2$

Since coefficient of multiple determination has tendency of overestimation, we have worked out the 'adjusted coefficient of multiple determination', $\bar{R}^2$. Since we did not find the presence of auto-correlation in the series of data of explanatory variables in the present exercise, but the same has been calculated by von Neuman Ratio Test while the explanatory variables tend to increase. It is obvious from Table II that all the coefficients exhibited positive sign. The first specification model takes the usual shape of exponential function significant at five per cent probability level revealing thereby, holding other input factors constant, labour is significant factor of production in view of its high elasticity coefficient. Similarly, in the second specification, labour is statistically significant at one per cent probability level with the elasticity coefficient 0.92, while capital elasticity coefficient is significantly lower, i.e. 0.09, statistically significant at five per cent level. If we drop the significant explanatory variable, i.e. labour, in multiple regression equation, we find in the third specification model land coefficient statistically significant at 10 per cent probability level having elasticity coefficient 5.65, while the capital coefficient is much lower 0.33 statistically significant at five per cent probability level with 0.89 $\bar{R}^2$ value. However, the above specifications can be compared with the last specification model, more meaningful, where land and labour are statistically significant at one per cent level, while the coefficient of capital is statistically significant at five per cent probability level.

The said specification further reveals that the land and labour are the two most important factors of production in agriculture in the state. The low capital elasticity is expected in view of the low capicity intensity on the farms in general and lack of technological change in particular in the agricultural sector. The highly significant labour coefficient suggests that there is no possibility of 'zero marginal productivity of labour' on farms. In this specification, $\bar{R}^2$ being very high, 96 per cent of variation in value of gross crop output per hectare is explained by the explanatory variables. Thus, agricultural sector continues to be under the grip of traditional farm technology in view of its low capital coefficiency which does not significantly contribute to the gross value of agricultural output while land and labour are significant contributory factors of production.

The parameters of Cobb-Douglas production function, in addition to being elasticity coefficients of respective factor inputs, possess the attribute of 'returns to scale' in production. In our model if:

$\beta+\gamma+\eta<1$ decreasing returns to scale
$\beta+\gamma+\eta>1$ increasing returns to scale
and
$\beta+\gamma+\eta=1$ constant returns to scale.

It can be observed from Table III that the sum of the elasticity coefficents is positive and greater than unity in all specifications indicating thereby increasing returns to scale. However, the fourth specification should be taken as more appropriate as it takes into account all factor inputs while estimating elasticity coefficients.

Similar to Table III, Table IV records the elasticity of production on the basis of the last specification model and marginal value productivity of factor inputs which are directly taken from the coefficients of Cobb-Douglas production function. The marginal value product of land is significantly greater than labour and capital inputs. Land in the state being very fertile has greater potential for growth and thus greater productivity, while owing to less capital-intensive agriculture, marginal value product of

TABLE II

The Least-Square Estimates of Cobb-Douglas Production Function Regarding Gross Value of Agricultural Output in Jammu and Kashmir (1960-61 to 1975-76)

Regression Number	Constant	Log X_1	Log X_2	Log X_3	$\bar{R}$
1.	0.1190	—	4.7933** (0.1289)	—	0.6860
2.	2.3112	—	0.9269† (0.0768)	0.0993** (0.1349)	0.9547
3.	—9.2993	5.4543* (0.1871)	—	0.3345** (0.1701)	0.8933
4.	1.1843	0.6140† (0.0678)	0.8399† (0.1806)	0.0655** (0.1255)	0.9653

Level of significance:
†Indicates level of significance at one per cent.
*Indicates the level of significance at 10 per cent.
**Indicatas the significance level at 5 per cent.
Note: Figures in parentheses are standard errors.

Table III

Returns to Scale in Jammu and Kashmir Agriculture: (1960-61 to 1975-76)

Particulars	Number of specifications			
	1	2	3	4
1. Sum of the elasticities	4.7933	1.0262	5.9888	1.5194
2. S.E.†	.1289	.1349	.3345	.1259
3. 't' value	2.7871*	2.1876*	3.7800**	3.9428**
4. Returns to scale	Increasing	Increasing	Increasing	Increasing

†Worked out on aggregate basis of multiple regression.
*Significant at 5 per cent level.
**Significant at one per cent level.

Table IV

Returns to Scale and Marginal Value Productivity of Inputs in Jammu and Kashmir Agriculture (1960-61 to 1975-76)

Particulars	Independent variables		
	X_1	X_2	X_3
Elasticity of production	0.6140	0.8399	0.0655
Marginal value product	4.1843	0.9266	0.1115

Appendix

Correlation Martix for the Aggregate Agricultural Output and Factor Inputs (Un-adjusted date) for Jammu and Kashmir (1960-61 to 1975-76)

	Cropped area (Index)	Farm labour	Capital	Gross value of agricultural output per hectare
	X_1	X_2	X_3	Y
X_1	1.0000	0.7881	0.8335	0.8779
X_2		1.0000	0.8951	0.9755
X_3			1.0000	0.9434

Correlation Martix for the Aggregate Agricultural Output and Factor Inputs Measured in Value Terms with Adjusted Data for Jammu and Kashmir (1960-61 to 1975-76)

	Cropped area (Index)	Farm labour	Capital	Gross value of agricultural output per hectare
	X_1	X_2	X_3	Y
X_1	1.000	0.0570	0.7233	0.7745
X_1		1.0000	0.7891	0.7500
X_3			1.0000	0.8277

capital input is low and capital is not used in the modern sense. The MVP of land shows that on farms, the marginal returns from each rupee spent on land is profitable. This conclusion we had arrived at earlier also. The value of commercial crops being relatively smaller in aggregate gross value of crop output throughout the period under study, the present analysis has more relevance in respect of policy formulation for non-commercial crops. Thus, it further substantiates our conclusions.[8]

Estimates of production function in agriculture have assumed considerable significance over the period in view of the requirements of fundamental parameters for policy formulation. The study authenticates the need for re-orientation of agricultural development strategy in the state and counters the views, expressed by a few on the basis of tentative observations, to drag agriculture towards mass orchardisation in order to achieve regional self-reliance. The analysis of available data directs to drift agriculture towards cereal-criented farming with the main thrust on restructuring the basic input-output matrix to overcome the local supply gap. In view of the high acreage elasticity coefficient and marginal value product, on the one hand, and significant labour elasticity coefficient, on the other, the sector needs the exploitation of its growth and employment potential by reallocation of resources with capital intensity bias.

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Human motivation and Indian perspective

Dr. P. Kumar Srivastava

Happiness is the goal of all human activity. Possession does not always gives rise to pleasant feeling. In the Indian context, the author, who is lecturer in Business Administration, University of Rajasthan, Jaipur, believes it is the feeling of "work is worship" which needs to be awakened as a motivator.

WITH PRODUCTIVITY or peak performance as its goal, the primary concern of the management is to get the work done from human beings. Motive is an inner urge that moves or prompts a person to action.[1] The innumerable and complex motives are divided into two broad categories, viz., primary or inborn and secondary or learned. The first category includes food, drink, comfort, to attract the opposite sex, welfare of loved ones, freedom from fear and danger, to be superior, social approval and to live longer. The secondary motives are bargains, information, cleanliness, efficiency, convenience, dependability, quality, style, beauty, economy, profit and curiosity.'[2] Whenever a human being feels tension awareness, he/she exerts efforts for fulfilling the above needs. The management tries to activate the behavioural pattern of human beings with the above forces or drives in view.

the jurisdiction

Thus, motivation falls within the jurisdiction of psychology, which *largely* deals with the individual and psychiatry, which deals *exclusively* with the individual. Psychiatry penetrates hidden motives. Every person is a unique individual. To know and understand the invisible inner motive, the outer level of human personality has no significance. One has to prove the conscious inner level and also the subconscious level, which the human being himself does not recognise. There is a superconscious level also, about which we do not find a mention in the occidental literature. It is the stage of *Nirvikalpa Samadhi.*

In the chronological order, the techniques of motivation have been described as fear and punishment, reward (i.e., paternalism) or have-your-cake-and-eat-it, reward-in-work emphasis, climate and atmosphere.[3] McGregor's Theory-X and Theory-Y, Robert Owen's "Paternalism", Taylor's "Differential Piece Rate System" and "Congenial Conditions of Work", Gantt's "Task and Bonus Scheme", Mayo's "Hawthorne Experiments" are covered by the above techniques.

Maslow's theory

As tension awareness of needs is felt by the mind, Maslow's need hierarchy, viz., the physiological needs, the safety needs, the love/social needs, the esteem needs and the self-fulfilment or self-actualization needs[4], has been accepted by other psychologists like Roethlisberger.

Herzberg disagreed with the above techniques and gave the key word "job-enrichment", the foundation-stone for his "Motivation-Hygiene Theory"[5].

In the context of India, it is said fear and punishment are the most effective motivators. In support of this argument, the instance that is readily made available is that of the "national emergency." After the declaration of the emergency, the output went up in the economic sector. But, the national emergency cannot be a permanent feature. As such, some other way has got to be searched out.

It is also argued that in the Indian perspective, money is the other important motivator. It helps in fulfilling physiological needs and prestige: social approbation, etc., follow suit. Materialistic prosperity may be a subsidiary motive but it is not an important one. We are well aware that an Indian worker does not follow the saying of Das Maluka, viz ,

> "अजगर करै न चाकरी, पंछी करै न काम -
> दास मलूका कह् गए, सब के दाता राम ।।"

in toto. Still, he is indolent in the sense that he is satisfied if he gets sufficient means of sustenence. Our economists talk of partial or disguised unemployment, which is on account of this very mentality of the Indian worker. The root cause of this satisfaction with the mere means of sustenence lies in the cultural matrix of India.

The average Indian does not believe in the philosophy of need maximisation or more desire, more efforts, more possessions and more satisfaction. He does not take satisfaction to be the goal of all human activities. The morning prayer of every Indian is, "Bless me with the ability to be happy in whichever circumstances I am." Whenever a junior (in age) touches the feet of a senior (in age) out of reverence, he is over blessed in India with the words: "Be happy". Even Maharshi Vedvyas has said, "Let all be happy", "सर्वे भवन्तु सुखिन:" Professor J.K. Mehta has defined economics as "a science that studies human activities as endeavour to reach the final end of happiness."

logical deduction

A logical deduction of Dr Maslow's need hierarchy is that among the two productive resources, viz., material and human, the former is more important because even the human beings hanker after material possessions. But, in the context of self-actualization, even he writes: "A musician must make music, an artist must paint, a poet must write, if he is to be ultimately HAPPY."[6] 'The instinct of self-actualization, is the subject-matter of the sub-conscious level of human personality. Thus, Dr Maslow seems to have misplaced the priorities.

Dr Herzberg suggests that efforts should be made to enrich the job. When "work is worship", there no more exists any scope for its enrichment. Every act of a human being is taken to be worship of the Almighty God in India!

"यद्यंत्कर्म करोमि तत्तदखिलं शम्भो तवाराधनम्"[7]

After this feeling, the work done to perfection verily becomes Yoga: "योगः कर्मसु कौशलम्"[8] and the activist becomes a Pandit: "यः क्रियावान् सः पण्डितः"[9]

It may be argued that it also amounts to fear and punishment, because it is out of fear that human beings worship God. Anyway, in between an urge originating from the conscious level on accouut of fear of the employer/the supervisor/ the management and that originating from sub-conscious level on account of fear of God, the latter is better, because it will reduce the cost of management.

The big business houses in India usually get constructed a temple nearby the business area. Its direct benefit is that it may be treated as an admissible item incurred on welfare for income tax purposes and its indirect benefit is that it teaches human beings the lesson of "work being worship". It is because of India's cultural matrix that some persons prefer uncomfortable houses nearer a temple so that they may pay daily visits than comfortable houses located far off from the temple.

Thus, in the Indian context, a better strategy than job-enrichment, is of mass scale awakening of the feeling of "work is worship."

Instead of human need satisfaction, happiness is the goal of all human activities. It is not a wholly correct argument that possession gives rise to "pleasant feeling", which leads to happiness. History bears testimony to it that happiness does not lie in the acquisition of possessions. The legendary King Midas was not happy at heart even after being blessed with abundant gold. Even inhabitants of affluent countries hanker after happiness. Self-preservation is said to be the prime instinct of every human being. But, only unhappy men are reported to have committed suicide. Thus, happiness is the first and the foremost motivator of every human being. The feeling of "work is worship" and not the lure of larger possessions enables winning noble prizes.

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TRADE WINDS

Restrictions on Cash Credit

THE RESERVE Bank recently imposed curbs on cash credit to big commercial borrowers with accounts of Rs 25 lakhs and above as part of an overall strategy to halt the rise in prices which are at present rising at a rate of 14 per cent per annum. It has also served notice on the scheduled commercial banks to reduce their reliance on RBI refinance. There are no changes in interest rate structure, particularly the bank rate which was feared in the industry circles for some time past.

The RBI governor, Dr I.G. Patel, explained his measures to chief executives of commercial banks in the context of an unprecedented rise of about Rs 1,540 crores in the credit extended to the commercial sector during the past four months. Until December-end the big commercial borrowers drawing power would be curtailed to 80 per cent of the peak levels of actual utilisation during the two year period ending June 1979. Other feature of the RBI strategy are: (1) Banks have been asked to keep their recourse to participation certificates to the outstandings as on July 27 this year; and (2) Reduction of refinance in respect of food credit and small farmers window.

In the context of the continued rise in prices during the past few months, there is need for banks to avoid undue credit expansion. This was emphasized by Dr Patel at a meeting he had with the chief executives of major banks.

The governor drew their attention to the excessive increase in commercial bank credit since the beginning of the current fiscal year and advised them to take immediate steps to remedy this.

He told banks that they must ensure that the increase in non-food credit in the current financial year is significantly less than in the previous year in both absolute and relative terms. For this purpose they must act from now on with greater firmness and effectiveness.

Effective Utilisation

The banks should seek to meet the additional demand for credit from out of their own resources, with minimum reliance on refinance from the Reserve Bank or other outside sources. In particular, the government repeated the earlier advice to the banks to reduce recourse to issue of participation certificates and to regulate more effectively the utilisation of cash credit sanctioned to borrowers.

To enable the banks to achieve the objective of controlling the increase in bank credit, the following measures were announced :

In case of all cash credit and bill accounts of Rs 25 lakhs and above, the effective drawing power under the cash credit from August 23, 1979 to the end of December 1979 would be limited to 80 per cent of the peak levels of actual utilisation reached during the two year period ended June 1979.

However, banks should see that this method of relaxing the drawing powers will in no case results in raising the cash credit limits as they stand on August 22, 1979. Banks may, in exceptional cases, permit additional credit up to 10 per cent of the level indicated above after satisfying themselves that such additional credit needs are completely justified in terms of production increases.

In respect of limits exceeding Rs 2 crores, which are subject to prior credit authorisation by the Reserve Bank any drawl in excess of the redefind level of 80 per cent of the peak of the last two years has to be approved by the Reserve Bank.

On the refinance facility from the Reserve Bank, the governor indicated the following measures:

1. Refinance in respect of food credit will be reduced from 50 per cent to 30 per cent in the excess of Rs 2,000 crores with effect from the last Friday of September 1979.

2. Refinance under the small farmers window will be limited to 50 per cent of the increase over the level as on the last Friday of December 1978.

Handtools to Australia and New Zealand

Indian handtools have fetched orders worth Rs 17.45 lakhs from Australia and New Zealand. The orders were secured during the course of a contact promotion programme undertaken by the Trade Development Authority with assistance from Commonwealth secretariat, London in these countries. Trade enquiries worth Rs 18 lakhs were also generated.

Under the contact promotion programme, a four-member team, which included a TDA officer and three industry representatives, visited major industrial and trade centres in Australia and New Zealand. They contacted a large number of wholesalers, importers, distributors, hardware specialised stores, department stores and retailers with samples and catalogues of handtools. The industry representatives were from Snail Spanners (India) Tools Ltd, Bombay; Presto Works, Jullundur and Hindustan Everest Tools Ltd, New Delhi.

Favourable Response

According to the team, the major, buyers and importers in the two countries evinced keen interest in the Indian products. Their reaction to the Indian handtools was generally favourable, both quality-wise and price-wise.

The items which bagged the orders included pliers, spanners, wrenches, hammers, vices, hand drills, tinsnips, G. cramps and chisels. The hand tool markets in Australia and New Zealand have remained virtually untapped so far. The Indian share in the total Australian and New Zealand imports of these products is just one per cent. This accounts for three per cent of the total handtools exports from India. The present orders are regarded as an encouraging development.

In 1976-77, the total exports of handtools from India were to the tune of Rs 30 crores, an increase of Rs 10 crores over the previous year. West Germany, the US, Britain, the Netheralands, Sweden and

Canada are major buyers of Indian handtools.

Central Assistance to Gujarat

The central government has sanctioned a sum of Rs 5 crores to the government of Gujarat as central assistance for the rehabilitation of victims of the recent flash floods. Five thousand tonnes of wheat and rice have also been sanctioned for a special 'Food for Work' programme for the repair of irrigation works, renovation of roads and water supply systems and other community assets.

The minister for Agriculture and Irrigation, Mr Brahm Perkash, who had an extensive aerial survey of the flood affected areas in Morvi and Malia talukas on August 15, had assured the Gujarat chief minister that he would discuss the urgent needs of the state government with the prime minister, the Finance minister and other cabinet colleagues. On the following day he held discussion with the prime minister and the Finance minister and requested them to sanction this amount immediately to enable the state government to meet its urgent needs. He has also taken up with the minister of Industry, Mr Brahmananda Reddy, the request of Gujarat chief minister for the supply of 50,000 tonnes of cement and 1300 tonnes of GI sheets for repairs and reconstruction of residental and factory buildings.

Sugar Output

According to the Indian Sugar Mills Association the ugar production during the econd fortnight of July, 979 (i.e. July 16-31) was bout 5,000 tonnes as against 33,000 tonnes during the same fortnight last year. The total production in the month of July, 1979, the tenth month of the season 1978-79 was about 13,000 tonnes as against 93,000 tonnes during the same month last season. This brings the total output during the first ten months of the season 1978-79 to 5,851,000 tonnes as against 6,394,000 tonnes during the corresponding period last year. The offtake of sugar from factories during the second fortnight of July was about 315,000 tonnes for internal consumption and 17,000 tonnes for exports as against 228,000 tonnes for internal consumption 32,000 tonnes for export during the same fortnight last season. The despatches during the month of July were 596,000 tonnes for internal consumption and 62,000 tonnes for exports as against 396,000 tonnes for internal consumption and 67,000 tonnes for exports during the same month last season. The total offtake in the first ten months in 1978-79 was 5,099,000 tonnes for internal consumption and 745,000 tonnes for exports as against 3,673,000 tonnes for internal consumption and 128,000 tonnes for exports during the corresponding period last season. The total closing stock of sugar with the factories as on July 31, 1979 was about 3,296,000 tonnes as against 4,167,000 tonnes on the same date last year.

Gujarat Industrial Investment Corp.

During July 1979, the Gujarat Industrial Investment Corporation (GIIC) has sanctioned a total financial assistance of Rs 220 lakhs to eight industrial projects. A new record has been set for financial assistance sanctioned during any month in the recent past. The amount of assistance sanctioned during this month has also exceeded the total amount of assistance sanctioned to large and medium scale industries during the entire year 1975-76.

The financial assistance comprises term loan amounting to Rs 216 lakhs to seven units and additional direct subscription in equity of Rs 4 lakhs to one unit. Among seven projects which have received term loans, there are three new projects and the rest four are expansion projects of the existing industries in the state. Notable among the new projects is a synthetic, cotton and blended hosiery yarn project which is being put up at Morvi having a capacity of 25,000 splindles and the total project cost is Rs 195 lakhs. This unit has received Rs 60 lakhs term loan and is likely to employ about 500 persons.

IDA Loan for Social Forestry

A programme to encourage village people in Uttar Pradesh to plant trees for fuel and raw materials will be assisted with a $23 million credit from the International Development Association (IDA). the World Bank's affiliate for concessionary lending. The $45 million Uttar Pradesh social forestry project will help lay a sound basis for a social forestry programme—the growing of trees outside the forest reserves to meet the needs of rural people—by expanding and strengthening the social forestry directorate, developing community awareness of the importance of forestry, establishing a nursery infrastructure, and initiating plantings on about 52,000 hectares of land, with varying degrees of participation from the local people.

To meet the daily forest product needs of the rural people by the turn of the century, afforestation at the rate of 80,000 ha annually is needed. The cost of a publicly funded programme of this magnitude would be prohibitive without some contribution from local people. The programme's long-term goal is the establishment of village plantings through self-help schemes, with the villagers providing the labour and the government contributing exten-

THE CALCUTTA ELECTRIC SUPPLY CORPORATION (INDIA) LIMITED

Notice is hereby given that the Board of Directors of this Company have decided to recommend the following Dividends for the Financial Year ended 31st March, 1979, subject to the deduction of tax at source at the prescribed rates, for declaration by the Members at the forthcoming First Annual General Meeting of the Company to be held on 27th September, 1979.

On 7½% Cumulative Preference Shares @ 7.5% i.e. 75 paise per share.

On Equity Shares @ 13% i.e. Rs. 1.30 per share.

The aforesaid dividends, if declared at the Annual General Meeting will be payable to members whose names appear on the Company's Register of Members on 14th September, 1979. In this connection the Register of Members of the Company at Calcutta will remain closed from 14th September, 1979 to 27th September, 1979 both days inclusive and during this period registration of transfers in respect of Preference and Equity shares of the Company will remain suspended.

By Order of the Board
S.K. NIYOGI
Secretary

Registered Office :
Victoria House
Chowringhee Square
Calcutta-700 001
22nd August, 1979.

sion services and materials. The project is therefore geared to the development of community awareness and participation.

The project will make possible an increase of at least 20 per cent in the fuelwood supply for some 6 million people. Mulberry and Arjun trees will be planted on 1,500 ha to provide labour-intensive employment opportunities in sericulture for local families. Most of the tree plantings will be along roads, rails and canals close to villages, thus eliminating the need to walk long distances for fuel. A greater abundance of fodder is expected to result in the annual production of an additional four million litres of milk. Forest-based cottage industries will be provided with more raw materials, creating additional employment opportunities within them and organic wastes which are now used for fuel will be freed for agricultural use. The government of Uttar Pradesh is contributing $21.8 million towards the project. The IDA credit is for 50 years, including 10 years of grace. The credit carries no interest, but bears a service charge of 3/4 of one per cent per annum to cover administrative costs.

Saraswat Cooperative Bank

The Reserve Bank has authorised the Saraswat Cooperative Bank Ltd, Bombay, to undertake all types of foreign exchange transactions in permissible currencies. The permission has been given subject to the conditions and obligations stipulated in the Exchange Control Manual (1978 Edition) and other directions issued by the Reserve Bank under Section 73 (3) of Foreign Exchange Regulation Act, 1973 as amended from time to time.

Assistance from West Germany

Dr Sigvard Eklund, Director General of the International Atomic Energy (IAEA) and Prof Rudolf Wittenzellner, Director of the Gesellschaft fur Strahlen-und Umweltforschung, Munchen (GSF) signed recectly two agreements to extend internationally coordinated research projects: the first concerning problems of fertilizer nitrogen residues, and the second for improving the protein quality of foodgrain by advanced plant breeding techniques. The agreement on an internationally coordinated research project on the problems of fertilizer nitrogen will extend the ongoing joint FAO/IAEA/GSF project with further financial support from the Federal Republic of Germany through the GSF of 827,000 DM (approx. US$ 435,000) for three years. This project was started in 1974. Nitrogen fertilizers play a vital role in helping agriculture to meet growing world food demands.

The extended project will concentrate on ways of controlling the fertilizer nitrogen losses to protect the environment and to conserve in the soil what is an energy-dependent, and therefore, increasingly costly input, especially for developing country agriculture. The second agreement signed concurrenly extends an internationally coordinated research project for improving the protein quality of foodgrains by advanced plant breeding techniques. This project was initiated in 1971. In the course of this project analytical and nutritional evaluation techniques have been developed and tested information on the inheritance and biosynthesis of seed storage proteins and on mutation plant breeding methods has been accumulated and is being applied in plant breeding programmes.

Fish Output

Total marine fish production in 1978 was estimated at 1.40 million tonnes as compared to 1.26 million tonnes in 1977, an increase of about 11 per cent in the total catch. According to the Central Marine Fisheries Research Institute, Cochin, the maximum production during the year was in Kerala 373,000 tonnes. It was followed by Maharashtra 284,000 tonnes: Tamil Nadu 213,000 tonnes; Gujarat 202,000 tonnes and Karnataka 153,000. tonnes. The other maritime states landed less than 100,000 tonnes. Excepting Andhra Pradesh, all maritime states registered an increase in their total landings.

Cardamom Exports

Earnings from cardamom export are expected to net Rs 70 crores during 1979-80, according to the Cardamom Board chairman, Mr S.G. Sundaram. He told newsmen recently that the earnings which were only Rs 7 crores 12 years ago would, within a short period, touch the Rs 100-crores mark. He said cardamom production which was 4,000 tonnes last year would reach 4,500 tonnes during 1979.

The Cardamom Board would undertake a market survey in the United States, Canada and Japan. Iran has emerged as an import market recently. To step up production, Mr Sundaram said, the board proposed to grow special varieties of cardamom in the plains also. Experiments conducted in Andhra Pradesh had yielded promising results. The board also proposed to undertake cardamom cultivation in Sikkim, he said.

UK Grant for Indian Projects

An agreement providing grant funds of Rs 54.8 crores (£31.10 million) to finance the rupee costs of Indian development projects and programme was signed in New Delhi recently by Mr A.G. Hurrel, Under-Secretary in the Overseas Development Administration, Foreign and Commonwealth Office, London, and Mr R.N. Malhotra, Additional Secretary in the central Ministry of Finance. The agreement covers the second instalment of grant funds totalling Rs 996 crores (£565 million) which will be made available to India before the end of the century to relieve her of the debt burden arising from past official loans from Britain. An agreement for the first instalment of Rs 35.4 crores (£20.09 million) was signed in New Delhi in March this year.

Two other agreements were also signed. The first one will provide Rs 19.6 crores (£11.1 million) to the Overseas Communications Service of India for the supply and installation by Standard Telephones and Cables Ltd of a submarine telecommunications cable between Madras and Penang (Malaysia), and the other will provide Rs 30 crores (£17.0 million) to finance the import of various types of earthmoving equipment for irrigation and multipurpose projects spread all over India. Completed at the same time were arrangeıeuts for British aid totalling ıs 10.2 crores (£5.8 million)) finance the cost of procurıg equipment and services rom the United Kingdom for ıe expansion of the naphthaased fertiliser plant near Kanır, Uttar Pradesh, where roduction of urea will be ıised by 50 per cent.

Credit for Small /endors

The government has advised anks to take immediate steps) meet the credit requirements f small vendors and traders ı the urban and metropolitan entres. The Reserve Bank of ndia has been asked to direct ationalised banks to draw p specific schemes of credit ssistance to these categories of orrowers in the urban areas here these banks function as ead banks.

The Finance minister, Mr. I. N. Bahuguna, expressed eenness as to extend borrowing ıcilities to vendors and petty aders operating in urban reas. Mr Bahuguna directd officers to devote atten on to the credit needs of egetable vendors, fish vendors e-cream vendors and small eddlers, He pointed out ıat these traders required ıly a limited amout of credit, hich at present they obtain om money lenders daily at orbitant rates of interest, he present direction to the ınks is expected to have a ɔncentrated impact on bank edit and will ameliorate e conditions of these small ɔrrowers.

ea for Morocco

This country has made a eakthrough in exporting tea Morocco, and Tea Board ficials interpret this as a significant achievement in pushing Indian Tea abroad. An Indian tea exporter has just secured an order for 1,000 tonnes of green tea from Morocco. While after 1971 India has not been able to send any tea to Morocco, repeat orders are now awaited from that country. According to indications available, Morocco is likely to buy 2,000 to 3,000 tonnes of green tea from India by the next yearend.

On an average, Morocco imports 13,000 tonnes of green tea from Taiwan and China principally. India's success in exporting green tea to Morocco signifies its success in diversifying its range of products. Considerable ingenuity is necessary in manufacturing green tea, the consuming countries have distinct preference and the tea has to have different qualities to cater to the needs of different countries.

IDBI Assistance to Flood Hit

With a view to expediting rehabilitation of industrial units in tiny, small scale and medium sectors, which have suffered damage in the recent floods in the wide area of Morvi and adjoining villages in Gujarat, IDBI has announced the extension of benefit under "Special Refinance Facility, 1979" (SRF, 1979), whereunder refinance on soft terms will be made available to eligible credit institutions in respect of the rehabilitation assistance sanctioned by them to such units, provided the purpose is to rehabilitate the units' plant or machinery and/or factory buildings/sheds and the assistance sanctioned represents the minium necessary to put the unit back into operation.

Where the stocks have suffered extensive damage, and for sanctioning fresh credit facility for working capital, bankers require the units to provide margins, the rehabilitation assistance may also include the minimum margin moneys needed.

In the case, however, of rehabilitation assistance up to Rs 10,000, the assistance may include, instead of merely the margin money, the full cost of providing the minimum level of stocks (raw materials and stores) required for the units to re-commence production. This should go for expeditious rehabilitation of units in the village and cottage industries sectors. The other salient features of the scheme are as under: (a) Refinance under SRF, 1979, will be available to units whose total assets do not exceed Rs 100 lakhs. (b) Loans eligible for refinance under SRF, 1979, will be subject to a ceiling of Rs 25 lakhs in the case of any one unit; (c) The usual norms of margin, promoter's contribution, debt-equity ratio, etc. will not apply; and (d) Full 100 per cent refinance will be provided irrespective of the classification or location of the unit.

Award for Tata Exports

Tata Exports Limited won the All-India Rotating Shield of the Engineering Export Promotion Council in recognition of its outstanding export performance during 1977-78 among export houses and merchant exporters in the country. The council in its award citation said that the phenomenal growth in Tata Exports' turnover—from Rs 11.4 crores in 1968-69 to Rs 106 crores in 1978-79 spoke for its enterprise and capacity.

Caprolactum Price

Following the increase in the prices of Benzene and other petroleum products announced by the Government of India on August 17, 1979, the Gujarat State Fertilizers Company has been compelled to increase the price of its Caprolactum to Rs 23,500 per metric ton exclusive of packing charges and government duty and levies with effect from August 20, 1979. This is the second time within this month that the price of Benzene has been hiked up. The first upward revision in the price of benzene was made on August 2, 1979 and GSFC had to raise the price of caprolactum from Rs 20,934 per metric ton to Rs 21,774 per metric ton

Names in the News

Mr N. N. Wanchoo, ICS, former secretary, Industries, and till lately governor of Kerala joined the board of directors of Sehgal Paper Ltd.

Mr Anil Basu has been elected president of the National Council of the Public Relations Society of India (PRSI) for 1979-80. **Mr K.S. Neelakanadan** has been elected vice-president, **Mr K. R. Singh**, secretary-general and **Mr I.M. Choksi**, Secretary-Treasurer.

Mr A. N. Confectioner has been elected chairman of the Bombay chapter of the Public Relations Society of India.

Mr V.S. Chopra has been elected vice-chairman of the Public Relations Society of India, Delhi Chapter.

Mr G. S. Ahuja has taken over as chief (finance) in the Housing and Urban Development Corporation Limited.

COMPANY AFFAIRS

Cimmco

CENTRAL INDIA Machinery Manufacturing Co Ltd, (Cimmco) has shown improved performance for the year ended March 31, 1979. Its sales have improved to Rs 1,674.03 lakhs (Rs 1,379.92 lakhs). The directors have recommended a higher equity dividend of 12 per cent against 10 per cent paid in the previous year. The company's gross profit stands at Rs 69.80 lakhs, of, this, depreciation claims Rs 21.65 lakhs, investment allowance reserve Rs 5.71 lakhs and taxation Rs 22.81 lakhs. A sum of Rs 2.50 lakhs has been transferred to the general reserve. The proposed dividend on equity as well as cumulative preference shares will claim Rs 18.63 lakhs. A balance of Rs 10,089 has been carried forward to the next year's balance sheet.

The textile division of the company is fully booked for the current year as the demand for automatic looms picked up after the government relaxed curbs on the expansion programmes of textile mills. The company has entered into collaboration with Lindauar Dornier Lindau of West Germany for the manufacture of shuftleless looms. The work on the project is progressing satisfactorily. The prototype is expected to be ready before the end of the current year. The company has developed an improved model of the automatic loom, the regular production of which is expected by the end of 1980. Another expansion plan includes production of automatic cone winding machines in collaboration with Karl-Mayer Maschinen Fabrik, Oberhausen, of West Germany.

Steel Division

The working results of the steel foundry division of the company have not been encouraging because of the sharp increase in prices of scrap and other raw materials. The directors are hopeful of a better outlook for the wagon division. The ministry of Railways and ministry of Heavy Industry have advised the company to step up its wagon production. The railways have fixed a higher production target of 2,775 wagons of four-wheeler units for the company. There is also a prestigious order for the supply of 45 wagons for the National Thermal Power Corporation. These will be produced in collaboration with Ortner Freight Car Company, Cincinati, Ohio.

The structural division of the company has successfully executed orders worth Rs 1.6 crores for the Madhya Pradesh government for its Tawa and Mahanadi projects. The export orders for the Khanabad irrigation project, Afghanistan have also been completed during the current year. The textile division has received orders from Zambia for semi-automatic looms. Other countries interested in these looms are Tanzania, Kenya, Mauritius and Sri Lanka. The wagon unit is executing orders for the export of 125 wagons to Vietnam Railways, and 50 wagons to Bangladesh Railways.

Bayer (India)

Bayer (India) has shown higher turnover for the first half of the current year and profits are also higher as compared to the corresponding period of last year. During the first six months of 1979, the company's sales amounted to Rs 22.79 crores against Rs1967 crores for the same period last year. Gross profit was recorded at Rs 3.04 crores. With other income of Rs 34 lakhs (Rs 14 lakhs), the total came to Rs 3.38 crores against Rs 3.18 crores. Out of this depreciation has taken Rs 48 lakhs (Rs 43 lakhs), investment allowances Rs 3 lakhs (Rs 10 lakhs) and tax liability Rs 1.67 crores (Rs 1.55 crores), leaving a net profit of Rs 1.20 crores compared to Rs 1.10 crores for the first half of the previous year.

Zuari Agro Chemicals

The directors of Zuari Agro Chemicals have stepped up the equity dividend from 10 per cent to 15 per cent for the year ended June 30, 1979. An application is being made to seek exemption of dividend from income-tax under Section-80-K of the Income Tax Act. The company has shown good performance. Despite a lower turnover of Rs 59.40 crores against the previous years Rs 65.32 crores the company has earned a higher gross profit of Rs 12.58 crores against Rs 11.95 crores.

After writing back Rs 38 lakhs from the previous provision for catalysts, the directors have set aside Rs 5.60 crores (Rs 4.80 crores) for development rebate reserve, Rs 55 lakhs (nil) for investment allowance reserve and Rs 11.49 lakhs (same) for writing off preliminary and share issue expenses, there is a surplus of Rs 2.48 crores compared to the previous years Rs 4.68 crores. Out of this, the proposed dividend on preference shares will abserb Rs 39.18 lakhs and that on equity Rs 186.40 lakhs. After taking into account the previous year's surplus of Rs 33.39 lakhs, Rs 55.32 lakhs is proposed to be transferred to general reserve. It may be mentioned that last year the company had cleared the entire arrears of preference dividend.

Raymond Woollen

Raymond Woollen Mills is maintaining the dividend at 12 per cent on the enlarged capital after a one-for-one bonus issue. Preliminary figures show a rise in the gross profit from the previous year's Rs 3.87 crores to Rs 4.48 crores in 1978-79 following expansion of sales from Rs 39.88 crores to Rs 48.69 crores. After providing for depreciation and writing off capital expenditure of Rs 135.69 lakhs against Rs 125.94 lakhs and for taxation Rs 55 lakhs against Rs 82 lakhs, the after tax profit is also higher at Rs 2.85 crores compared to Rs 1.79 crores last year.

A sum of Rs 53.60 lakhs (Rs 36 lakhs) has been transferred to the investment allowance reserve. The proposed dividend will absorb Rs 50.01 lakhs (Rs 25.82 lakhs). After setting aside Rs 1.01 crores (Rs 1.17 crores) for general eserve, the balance of s 53.35 lakhs is to be carried orward to the current year's ccount.

Operations in all the three nanufacturing divisions of the company have shown good progress during the year. The expansion project of J.K. Engineers' Files at Ratnagiri in Maharashtra has been in full operation throughout the year. Exports of woollen goods and engineers files amount to Rs 6.09 crores against Rs 4.02 crores in 1977-78.

The company has installed and commissioned new spinning machines before the close of the year at its new project at Jalgaon. Other preparatory and post-spinning machinery and new looms are in the process of installation. The company has also undertaken a new project for the manufacture of portland cement in Madhya Pradesh.

Morarjee Goculdas

The directors of Morarjee Goculdas Spinning and Weaving Mills have recommended a dividend of 20 per cent for the year ended June 30, 1979 as against 16 per cent for the previous year. The company has shown a gross profit of Rs 4.03 crores following total sales of Rs 43.25 crores against Rs 37.41 crores.

Out of the profits, the directors have set aside Rs 71.48 lakhs (Rs 59.10 lakhs) for depriciation, nil (Rs 25 lakhs) for additional bonus, Rs 1.48 crores (Rs 78 lakhs) for taxation and Rs 37 lakhs (Rs 22.28 lakhs) for investment allowance. The proposed dividend will require Rs 57.17 lakhs (Rs 45.96 lakhs). A sum of Rs 89.38 lakhs is proposed to be transferred to general reserve as against Rs 55.31 lakhs last year.

The directors attribute this good performance to the availability of cotton at reasonable prices and the liberal import policy of the government in regard to polyester, polynosic and viscose staple fibres. The management's policy of continued modernisation of plant and machinery, moreover, is another major contributory factor. Machinery worth Rs 2.04 crores was installed last year.

The company has chalked out an ambitious programme of modernisation spread over a period of three years and is estimated to cost Rs 9.5 crores. The programme is intended to be financed partly by a soft loan from IDBI and partly by self generated funds.

Modipon

Modipon is setting up a new undertaking at Mandideep near Bhopal for the manufacture of edible soya flour, soya textured protein, soya protein isolates and soyabean oil. A new company is being formed to take up the project. Necessary application for capital goods has been submitted to the government.

The company's licensed capacity for nylon filament yarn has been increased to 4,760 tonnes. Steps are being taken to implement the expansion. It is also seeking permission of the government to increase its capacity of polyester filament yarn. The company has proposed a dividend of 25 per cent for the year ended February 1979 and issue of bonus shares in the proportion of one bonus share for every equity share held. The directors have recorded their intention to pay about 10 per cent dividend on the expanded capital after the bonus issue.

During 1978-79, the company earned a gross profit of Rs 4.05 crores despite marginally higher turnover of Rs 39.28 crores. The management attributes deterioration of profit margin to the keener competition in the market, increase in excise rates and liberal imports of nylon yarn allowed by the goverment.

Indian Dyestuff

During the first four months of the current year, Indian Dyestuff has maintained its sales at Rs 18.58 crores against Rs 18.45 crores in the corresponding period last year. this, the export sales were about Rs 3.04 crores, against Rs 3.17 crores. The chairman of the company told the annual general meeting at Bombay recently that since the textile mills continued to do better during the current year also, the demand for dyestuff was expected to be maintained at the same level as last year. However, the company was passing through a difficult period in view of a sharp rise in prices, especially of essential raw material. The cost of power, fuel and labour had also shot up, he added.

The chairman stated that

BHARAT COMMERCE & INDUSTRIES LIMITED

- India's most experienced manufacturers of Viscose Spun Rayon, Acetate Spun, Synthetic Blended and Fancy Yarns.
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1. **Bharat Commerce & Industries Ltd. P.O. Birlagram, Nagda (M.P.)**
2. **Kiran Spinning Mills, Kolshet Road, Thane (Maharashtra)**
3. **Bharat Commerce & Industries Ltd. Rajpura (Punjab)**
4. **Sujata Textile Mills, Nanjangud (Karnataka)**

Regd. Office.

Surya Kiran, 5th Floor,
19 Kasturba Gandhi Marg,
New Delhi 110 001

the prospect for the current year, therefore, did not seem to be encouraging. However, continuous efforts were being made to neutralise its adverse effect by adopting various measures.

The chairman added that the production had been maintained at the last year's level despite block closure and raw material shortages. Necessary changes were made in product mix to face the international competition. He said, the expansion work at Tarpur was in a fairly advanced stage and is expected to be completed by September-end and the production would start from November. The benefit from the expansion programmes would start accuring from the current yer, he added.

Malayalam Plantations

Malayalam Plantations (India) Limited entered the capital market with an issue of 779,930 equity shares of Rs 10 each for cash at par on August 28. Out of the present issue, 60,000 equity shares are reserved for allotment to public financial institutions and 59,930 equity shares for allotment to the employees, Indian directors and business associates. The Indian company has issued 2,220,000 equity shares of Rs 10 each to Malayalam Plantations Limited UK in part consideration for the transfer of the whole of the Indian undertaking, including all properties and liabilities of the sterling company in India.

The sterling company has been carrying on the business of tea and rubber production on its plantations in India since 1921. The company, at present, has 26 estates; 24 of which are situated in Kerala and two in Tamil Nadu. The aggregate planted area is 16,271 hectares out of the total area of 26,326 hectares. An attractive feature of the company's activities is its dual plantation strategy of producing both tea and rubber,

The company has already taken up further development of its plantations on a large scale. It has started infilling of tea in its estates at the rate of about 800,000 plants a year, and has plans to bring more areas of tea plantation. As regards rubber, it has planted a large area with high-yielding varieties of rubber.

The company's turnover for the 10 months ended January 31, 1979, amounted to Rs 1,735.51 lakhs yielding a gross profit of Rs 275.27 lakhs. After providing Rs 195 lakhs for tax the net profit for the period works out to Rs 80.27 lakhs. The equity shares now being issued shall be entitled to full dividend that may be declared for the year ended March 31, 1979.

Kanoria Chemicals

The directors of Kanoria Chemicals and Industries Ltd have recommended a dividend of 10 per cent on equity shares for the year ended March 31, 1979. An application is being made by the company to the Income-Tax department for determining the percentage of the dividend exempt under ection 80K of the Income-Tax Act, 1961. The company has recorded a substantial increase in sales from Rs 1,339.84 lakhs to Rs 2,126.63 lakhs during the year and has earned a higher gross profit of Rs 186.27 lakhs.

After providing Rs 66.73 lakhs (Rs. 55.74 lakhs) for depreciation and Rs 30 lakhs (Rs 20 lakhs) for taxation, the profit amounts to Rs 89.55 lakhs against Rs 77.07 lakhs.

Pursuant to the approval of the Reserve Bank of India, the company has taken over all assets and business of Ludlow Jute Co Ltd in India, including Ludlow Jute Mills at Chengail in Howrah district. The total export earnings of the company have also recorded an increase from Rs 323.88 lakhs to Rs 861.61 lakhs including Rs 803.88 lakhs (Rs 279.15 lakhs) on account of jute goods export.

Bhadrachalam Paperboards

Bhadrachalam Paperboards Limited has commenced trial runs and is moving satisfactorily towards launching commercial production, meeting the original schedule of October 1, 1979. Promoted by ITC Limited with participation by Vazir Sultan Tobacco Company Limited and Andhra Pradesh Industrial Development Corporation the project has been set up near Bhadrachalam, a notified backward area in district Khammam, Andhra Pradesh. The mill has a capacity to produce 40,000 tonnes of paper and carton board per year. Civil activity at site started in April, 1977 and trial runs were conducted in July, 1979.

The report of the directors states an overrun on the capital cost of the project to the extent of 11 per cent. The project was originally envisaged to cost Rs 44 crores. In addition certain infrastructural assistance was to be provided by the state government. Presently the project is envisaged to cost Rs 49 crores. The bulk of the overrun is on account of meeting various infrastructural needs like schools, community centre, water, housing etc necessitated by the backwardness of the area and also to meet the statutory increases such as increase in rates of general excise duty and adverse fluctuations in foreign exchange, on which the management had no control.

Addressing the annual general meeting of the shareholders on August, 21, 1979 at Hyderabad the chairmain Mr R.C. Sarin thanked the central government, the financial institutions and the banks for all the assistance provided for the speedy implementation of the project. Talking about the assistance provided by the state government the chairman observed, "Based on the evidence of the past three years, I do not hestitate to make a public statement that, since our own experience with the Andhra Pradesh government of industrialising a backward tribal area like Bhadrachalam, has been a rewarding one, then the future of increas-

THE CALCUTTA ELECTRIC SUPPLY CORPORATION (INDIA) LTD.

7¾% Debenture Stock, 1980
Interest for the half year ending 14th October, 1979.

Notice is hereby given that interest @ Rs. 38.75 P. less Income Tax, per Rs. 1,000/- of stock will be paid on 15th October, 1979 to Debenture Stockholders registered in the books of the Company on 14th October, 1979. In this connection the Register of Debenture Stockholders will be closed from 9th October, 1979 to 14th October, 1979, both days inclusive.

By Order of the Board
S.K. NIYOGI
Secretary

Registered Office :
Victoria House
Chowringhee Square
Calcutta-700 001
22nd August, 1979.

ed industrialisation and increased job opportunities for Andhra is very bright and the state provides the right environment for new and genuine enterprise."

Bombay Wire Ropes

Bombay Wire Ropes is back on the dividend list with a dividend of eight per cent after a year. The last dividend was six per cent in 1976-77 and in 1975-76 it was eight per cent. The company has fared well with its turnover more than doubling to Rs 7.67 crores from Rs 3.32 crores in the previous year. The gross profit has shot up five-fold to Rs 25 lakhs from Rs 4.62 lakhs last year.

The provision for depreciation is Rs 9.75 lakhs compared to Rs Rs 9.71 lakhs, leaving a net profit of Rs 15.25 lakhs against Rs 14.32 lakhs in 1977-78. No tax provision has been made in view of the carried-forward losses for income tax purposes. The disposable profit is placed at Rs 17 lakhs (compared to Rs 2.22 lakhs) after adding from last year's surplus Rs 1.75 lakhs against Rs 4.56 lakhs and drawing from the general reserve nil against Rs 12 lakhs.

The proposed equity dividend will absorb Rs 4.27 lakhs (nil) and the usual preference dividend Rs 0.47 lakhs (same). The company his credited Rs 5 lakhs (nil) to the general reserve, leaving Rs 7.25 lakhs (Rs 1.75 lakhs) to be carried forward. The production of wire ropes during the year rose to 4,953 tonnes from 1,646 tonnes and sales to 4,851 tonnes from 1,680 tonnes. During the year it exported 4,030 tonnes of steel wire ropes valued Rs 2.35 crores

Tata Hydro-Electric

At the board meetings held on August 9,1979, the directors of Tata Hydro-electric Power Supply Co Ltd decided to recommend the following dividend subject to deduction of tax at source under Section 194 of the Income-tax Act, 1961 for the year ended March 31,1979 to be paid, if declared at the annual general meetings.

The Tata Hydro-Electric Power Supply Co Ltd : (i) A dividend of Rs 7.00 per share on 7 per cent preference shares ; and (ii) A dividend of Rs 13.00 per share on ordinary shares (same as last year)

The Andhra Valley Power Supply Co Ltd : (i) A dividend of Rs 7.00 per share on 7 per cent preference shares; (ii) A dividend of Rs 9.25 per sh re on 9.25 per cent cumulative redeemable 'A' preference shares; and (iii) A dividend of Rs 13.00 per share on ordinary shares (same as last year).

The Tata Power Co Ltd : (i) A dividend of Rs 7.50 per share on 7½ per cent perference shares ; (ii) A dividend of Rs 9.25 per share on 9.25 per cent cumulative redeemable A' preference shares; and (iii) A dividend of Rs 13.00 per share on ordinary shares (same as last year).

National Insulated Cable

The National Insulated Cable Company of India has shown an improvement in its performance for the year ended April 30, 1979. Its revenue touched an all time high of Rs 1179 lakhs. The profit rose to Rs 57.86 lakhs compared to previous year's Rs 42.01 lakhs. The company has stepped up its dividend to seven per cent which would absorb Rs 14.17 lakhs and has transferred an amount of Rs 3.29 lakhs to its investment allowance reserve and Rs 27.88 lakhs to its general reserve. The company has been able to turn in these improved results due to increased levels of production in all sections and also, through more effective control over its operations.

The company has ambitious long range plans which include modernisation of its existing factory and embarkment on new projects. A new company called 'Nicco Orissa Ltd,' has been incorporated with a view to produce cross-linked polyethylene power cables in the joint sector in Orissa. Nicco has further negotiated with M/s Furmanite International Ltd, UK for the establishment of a service industry in India to provide the revolutionary 'Furmanite' process whereby steam leaks, vacuum leaks and various gas leaks can be sealed under high pressure and temperature conditions without necessitating plant shutdown.

Keltron Controls

The foundation stone laying ceremony of 'Keltron Conrols' a new division of Kerala State Electronics Development Corporation Limited, took place on the August 12, 1979 at Aroor in Alleppey, an industrially backward district of Kerala. This project is being implemented in collaboration with M/s. Controle Bailey of France, the world renowned firm in the field of control instrumentation. This project on instrumentation and control system, most essential for total control of thermal and nuclear power stations and process industries such as cement, steel, paper, Fertilisers and chemicals, was identified as a major project to attain self-reliance for the country. This was one of the technologies in which the nation lagged behind and imports worth several crores of rupees have been made in the past and continue to be made today.

Keltron's agreement with Controle Bailey envisages rapid indigenisation of technology which will reduce the percentage of import content. This 7.5-crore project will provide work to about 1000 persons.

Capital and Bonus Issues

Consent has been granted to three companies to issue bonus shares and to two companies to issue further equity shares. The details are :

Boots Co. (India) Limited : To issue bonus shares for Rs 56,60,500 of Rs 10 each in the ratio of 1:3.

Jawahar Mills Limited : To issue bonus shares for Rs 39,99,770 of Rs 5 each in the ratio of 1:1.

OEN Limited : To issue bonus shares for Rs 20,80,000 of Rs 100 each in the ratio of 2:5.

Arvind Mills Limited : To issue equity shares of Rs 25,500 to the shareholders of Ahmedabad Laxmi Cotton Mills Limited in pursuance of a scheme of amalgamation as approved by the Gujarat High Court.

Indosil Pvt Ltd : To issue further capital of Rs 66,09,600 in equity shares of Rs 10 each as fully paid up to the shareholders of Wellman (India) Pvt Ltd in the ratio of 17 equity shares of Rs 10 each in Indosil Pvt Ltd for every one fully paid equity share of Rs 100 held in Messrs Wellman (India) Pvt Ltd in pursuance of the scheme of amalgamation as approved by the Bombay High Court.

RECORDS AND STATISTICS

Current statistics

(Index numbers of wholesale prices for the week ended July 28, 1979)

THE OFFICIAL wholesale prices index (Base : 1970-71=100) for 'All Commodities' stood at 212.1 (provi.) during the week ended July 28, 1979 as against 211.0 for the previous week. At this level, the index was higher by 0.5 per cent and 13.8 per cent respectively when compared to the previous week and that of a year ago.

Groupwise analysis of price movement is shown below:

The index for 'Food Articles' moved up by 0.8 per cent to 191.0 as against 189.5 for the previous week due to an increase in prices of tea (+4%), barley and maize (+3% each), rice, bajra, ragi, masoor, urad and fruits & vegetables (+2% each), wheat, jowar, ghee and spices & condiments (+1% each). However, prices of eggs (—3%), arhar, moong, milk and coffee (—2% each) declined.

Increased prices of castorseed (+6%), gingellyseed, linseed, raw rubber and lac (+4% each), groundnuts, rape & mustard seed, nigerseed and kardi seed (+3% each), raw jute, raw wool and logs & timber (+1% each) pushed up the index for 'Non-Food Articles' by 0.7 per cent to 191.0 as against 189.6 for the earlier week. However, prices of raw tobacco (—6%), mohua seed (—3%), cottonseed (—2%) and copra and raw silk (—1% each) fell.

The index for 'Minerals' group stood stationary at its earlier week's level of 707.9.

The index for 'Fuel, Power, Light & Lubricants' group remained unchanged at its previous week's level of 268.3.

Among manufactured products, the index for 'Food Products' recorded a rise of 1.2 per cent to 207.9 when compared to 205.4 for the last week owing to an advance in prices of rice bran oil (+8%), mustard oil, cotton seed oil, solvent extracted groundnut oil and oil cakes (+4% each), maida, atta, suji, khandsari, groundnut oil, gingelly oil and kardi oil (+3% each), processed milk and gur (+1% each). Price of sugar (—2%), however, declined.

The index for 'Beverages, Tobacco & Tobacco Products' remained firm at its previous week's level of 184.6.

The index for 'Textiles' group stood at 194.7 as against 194.6 for the last week. Prices of handloom & powerloom cloth recorded fractional rise while coir yarn (—2%) fell.

The index for 'Paper & Paper Products' stood stationary at its previous week's level of 217.0.

The index for 'Leather & Leather Products' remained firm at its previous week's level of 314.4.

The index for 'Rubber & Rubber Products' recorded no change and remained at 199.5.

The index for 'Chemicals & Chemical Products' group worked out at 185.2 as against 185.0 for the previous week. Prices of linseed oil (+4%) moved up.

The index for 'Non-Metallic Mineral Products' stood stationary at its last week's level of 240.6.

The index for 'Basic Metals, Alloys & Metal Products' remained unchanged at its earlier week's level of 246.3.

Higher prices of starters (+17%), agricultural sprayer (+8%), three wheelers and wheels (+6% each), electrical cables & wires (+4%), textile machinery & stores (+3%) and electricals (+1%) raised the index for 'Machinery & Transport Equipment' group by 0.7 per cent to 205.9 as against 204.5 for the previous week. However, prices of radiators (—6%), springs (—4%) and rims (—1%) declined.

The index for 'Miscellaneous Products' rose by 0.5 per cent to 204.8 as against 203.7 for the last week owing to an increase in prices of particle board (+14%) and house service meters (+7%).

Index Numbers of Wholesale Prices by Major Groups, Groups & Sub-Groups (Base : 1970-71=100)

Major groups, groups & sub-groups	Weight in relation to all-commodities	Week ending 28-7-79 (Latest week)	21-7-79 (A week ago)	30-6-79 (4 weeks ago)	2-6-79 (8 weeks ago)	29-7-78 (A year ago)
		(Provisional)			(Final)	
1	2	3	4	5	6	7
ALL COMMODITIES	**1000.00**	**212.1**	**211.0**	**203.3**	**200.0**	**186.4**
I. **Primary Articles**	**416.67**	**206.5**	**205.0**	**196.7**	**191.3**	**183.0**
A. **Food Articles**	**297.99**	**191.0**	**189.5**	**186.4**	**180.3**	**175.9**
Foodgrains (i+ii)	129.22	181.8	179.9	175.7	171.1	172.0
(i) Cereals	107.43	169.0	166.7	162.9	157.5	158.3
(ii) Pulses	21.79	244.9	245.2	238.5	238.3	239.3
(iii) Fruits & vegetables	61.32	216.2	211.9	206.1	194.6	172.5

—Contd.

Index Numbers of Wholesale Prices by Major Groups, Groups & Sub-Groups—*Contd.*

1	2	3	4	5	6	7
(iv) Milk & milk products	61.50	171.4	174.2	175.7	175.6	172.2
(v) Eggs, fish & meat	18.97	235.6	236.5	241.0	225.9	222.7
(vi) Condiments & spices	10.94	149.5	147.4	138.2	134.6	176.2
(vii) Other food articles	16.04	219.6	212.5	206.2	195.1	179.3
B. Non-Food Articles	**106.21**	**191.0**	**189.6**	**182.3**	**178.2**	**167.5**
(i) Fibres	31.73	167.3	166.8	165.0	166.5	170.2
(ii) Oilseeds	42.01	190.0	185.8	169.2	160.0	163.0
(iii) Other non-food articles	32.47	215.3	216.7	216.0	213.2	170.7
C. Minerals	**12.47**	**707.9**	**707.9**	**566.9**	**566.0**	**485.7**
(i) Metallic minerals	2.29	206.0	206.0	206.0	206.0	202.4
(ii) Other minerals	4.16	202.6	202.6	205.3	202.6	196.6
(iii) Petroleum crude & natural gas	6.02	1249.0	1249.0	954.7	954.7	793.9
II. Fuel, Power, Light & Lubricants	**84.59**	**268.3**	**268.3**	**252.7**	**252.6**	**245.3**
(i) Coal mining	11.47	327.4	327.4	212.1	211.5	211.3
(ii) Mineral oils	49.12	279.3	279.3	279.3	279.3	271.2
(iii) Electricity	24.00	217.8	217.8	217.8	217.8	208.5
III. Manufactured Products	**498.74**	**207.2**	**206.3**	**200.5**	**198.3**	**179.2**
A. Food Products	**133.22**	**207.9**	**205.4**	**188.1**	**178.2**	**161.3**
(i) Dairy products (incl. processed milk & tinned milk)	3.88	214.7	208.3	208.3	208.3	204.9
(ii) Canned & preserved fruits & vegetables	0.39	175.0	175.0	175.0	175.0	166.6
(iii) Canned & preserved fish & sea food	0.36	262.1	262.1	262.1	262.1	206.0
(iv) Grain mill products	4.64	167.3	162.8	162.8	163.1	165.9
(v) Bakery products	1.85	156.8	156.8	156.8	156.8	157.4
(vi) Sugar, khandsari & gur	72.41	220.6	220.0	196.4	181.8	154.7
(vii) Sugar, confectionery, cocoa & chocolate	0.53	164.4	164.4	164.4	164.4	159.8
(viii) Miscellaneous food products (a+b+c)	49.16	194.8	189.6	177.8	172.4	166.9
(a) Edible oils	37.16	192.9	188.1	175.2	167.6	158.3
(b) Oilcakes	9.05	202.8	194.2	183.1	185.5	193.4
(c) Other miscellaneous food products	2.95	193.5	193.5	195.6	193.1	194.0
B. Beverages, Tobacco & Tobacco Products	**27.08**	**184.6**	**184.6**	**184.6**	**184.6**	**177.8**
(i) Wine industry	6.77	141.7	141.7	141.7	141.7	139.3
(ii) Soft drinks	0.82	196.6	196.6	196.6	196.6	224.9
(iii) Tobacco manufactured	19.49	199.0	199.0	199.0	199.0	189.3
C. Textiles	**110.26**	**194.7**	**194.6**	**192.4**	**193.3**	**176.1**
(i) Cotton textiles	81.02	193.4	193.1	191.2	191.0	180.1
(ii) Woollen yarn & textiles	2.44	224.8	224.8	224.8	224.2	216.7
(iii) Silk, art silk & synthetic fibre textiles	12.83	179.6	179.7	177.9	176.3	167.6
(iv) Jute, hemp & mesta textiles	12.14	201.6	201.6	196.4	208.0	142.9
(v) Textile products n.e.c.	1.83	273.2	277.9	277.9	274.7	222.5

—Contd.

Index Numbers of Wholesale Prices by Major Groups, Groups & Sub-Groups—*Contd.*

1	2	3	4	5	6	7
D. **Paper & Paper Products**	**8.51**	**217.0**	**217.0**	**217.0**	**214.1**	**190.4**
E. **Leather & Leather Products**	**3.85**	**314.4**	**314.4**	**315.0**	**320.0**	**255.3**
(i) Tanned & cured finished leather	2.95	349.8	349.8	350.5	357.1	273.1
(ii) Footwear & other leather products	0.90	197.7	197.7	197.7	197.7	196.5
F. **Rubber & Rubber Products**	**12.07**	**199.5**	**199.5**	**199.5**	**199.5**	**177.8**
(i) Tyres & tubes	9.84	199.4	199.4	199.4	199.4	177.3
(ii) Other rubber products	2.23	200.0	200.0	200.0	200.0	180.1
G. **Chemicals & Chemical Products**	**55.48**	**185.2**	**185.0**	**183.9**	**182.6**	**175.8**
(i) Basic industrial chemicals	7.26	240.8	240.8	240.7	234.2	206.4
(ii) Fertilizers	12.52	166.6	165.6	165.0	165.0	175.9
(iii) Insecticides	1.16	252.8	252.8	252.8	252.8	231.1
(iv) Paints & varnishes	1.92	218.5	218.5	217.0	218.5	203.1
(v) Drugs & medicines	9.83	135.3	135.3	135.4	135.3	136.2
(vi) Cosmetics, soap & detergents	5.86	194.2	194.2	194.4	194.6	183.4
(vii) Inedible oils	1.54	189.6	183.4	156.9	148.7	144.4
(viii) Synthetic resin/rosin & plastic materials	8.30	175.8	175.8	175.8	175.8	168.4
(ix) Dyestuffs & other chemicals n.e.c.	7.09	212.7	212.7	212.7	211.0	192.2
H. **Non-Metallic Mineral Products**	**14.15**	**240.6**	**240.6**	**239.0**	**238.9**	**208.3**
(i) Structural clay products	1.82	245.7	245.7	244.1	243.1	208.7
(ii) Glass & glass products	1.98	273.3	273.3	272.9	273.1	251.6
(iii) Earthenware & earthen pottery	0.96	283.7	283.7	283.7	283.7	252.8
(iv) Cement, lime & plaster	7.07	228.8	228.8	226.3	226.3	190.0
(v) Miscellaneous non-metallic mineral products	2.32	227.2	227.2	226.2	226.3	208.3
I. **Basic Metals, Alloys & Metal Products**	**59.74**	**246.3**	**246.3**	**242.8**	**244.6**	**211.4**
Basic metals & alloys (i+ii)	46.51	250.3	250.3	248.2	249.1	215.4
(i) Iron, steel & ferro alloys	34.73	254.9	254.9	253.7	254.9	215.0
(ii) Non-ferrous metals & their alloys	11.78	236.6	236.6	232.0	232.0	216.6
(iii) Metal products	13.23	232.2	232.2	224.0	228.7	197.6
J. **Machinery & Transport Equipment**	**67.18**	**205.9**	**204.5**	**203.8**	**205.3**	**182.3**
Machinery & machine tools (i+ii)	50.45	205.1	203.4	202.4	204.5	181.8
(i) Non-electrical machinery	30.91	214.5	211.3	210.4	211.5	186.8
(ii) Electrical machinery	19.54	193.4	190.8	189.8	193.3	173.9
Transport equipment (iii+iv)	16.73	208.3	208.0	208.0	208.0	184.1
(iii) Motor vehicles & parts	13.73	215.3	214.9	214.9	215.3	190.4
(iv) Motorcycles/scooters, bicycles & parts	3.00	176.2	176.3	176.2	174.5	155.2
K. **Miscellaneous Products**	**7.20**	**204.8**	**203.7**	**203.7**	**204.1**	**182.2**
(i) Wood & wood products	1.74	208.2	206.7	206.7	208.2	191.5
(ii) Other manufacturing industries n.e.c.	5.46	203.6	202.7	202.7	202.7	179.2

Source : Office of the Economic Adviser, Ministry of Industry, Government of India

Consumer Price Index Numbers for Industrial Workers

(Base : 1960 = 100)

Centre	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979 April	1979 May	1979 June	A year ago
All-India	**186**	**192**	**207**	**250**	**317**	**313**	**301**	**324**	**331**	**337**	**339**	**345**	**327**
Ahmedabad	176	181	198	245	305	293	281	310	323	328	331	335	324
Alwaye	198	202	215	267	346	358	321	319	335	344	352	357	332
Asansol	189	194	206	245	316	317	318	338	342	348	354	357	332
Bangalore	186	194	212	265	318	332	321	342	339	350	354	359	336
Bhavnagar	186	194	217	273	327	315	297	325	340	344	345	352	341
Bombay	182	190	203	233	289	300	298	318	325	331	335	344	325
Calcutta	182	187	197	228	288	287	297	320	331	331	335	346	319
Coimbatore	163	177	189	218	309	319	304	319	326	332	343	347	321
Delhi	199	211	222	265	337	333	332	358	368	375	374	378	364
Digboi	189	188	198	234	310	317	310	336	339	342	350	360	338
Gwalior	191	197	214	271	348	324	318	343	350	352	352	354	352
Howrah	186	191	206	239	298	290	292	313	319	325	329	332	308
Hyderabad	189	195	211	251	304	316	308	337	341	340	338	345	338
Jamshedpur	183	187	202	249	313	293	288	316	322	329	331	336	317
Madras	170	182	203	229	301	314	288	311	318	327	327	334	310
Madurai	183	192	206	236	334	333	302	331	338	346	349	350	331
Monghyr	205	204	225	292	363	325	317	345	348	352	349	363	339
Mundakayam	197	199	210	263	337	346	304	302	313	318	323	325	305
Nagpur	187	192	203	256	314	326	297	315	325	332	333	339	319
Saharanpur	186	196	213	253	338	313	304	335	345	348	342	343	340
Sholapur	185	198	216	277	325	342	308	326	343	347	349	356	339

Source : Labour Bureau, Government of India, Chandigarh.

Consumer Price Index Numbers for Urban Non-manual Employees

(Base : 1960 = 100)

Centre	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979 April	1979 May	A year ago
All-India	**174**	**180**	**192**	**221**	**270**	**277**	**277**	**296**	**306**	**311**	**314**	**300**
Bombay	168	172	183	204	241	246	255	269	285	298	303	279
Delhi-New Delhi	174	180	190	217	262	273	274	288	303	311	313	298
Calcutta	170	174	180	204	238	243	251	265	279	282	286	268
Madras	175	188	204	231	291	306	294	311	321	329	332	316
Hyderabad-Secunderabad	174	180	195	223	270	283	282	305	318	322	325	311
Bangalore	172	180	194	228	272	284	286	306	309	316	321	306
Lucknow	166	174	185	215	265	270	274	297	305	309	310	299
Ahmedabad	171	173	188	222	271	272	263	291	298	300	302	298
Jaipur	183	188	205	244	308	311	312	334	338	344	341	332
Patna	191	190	199	229	286	284	282	299	308	316	313	297
Srinagar	184	191	200	215	262	280	300	319	344	353	357	336
Trivandrum	178	184	198	231	280	297	301	309	319	329	331	310
Cuttack-Bhubaneswar	176	184	196	221	266	270	272	290	301	304	307	294
Bhopal	180	188	204	238	295	296	295	318	319	320	321	316
Chandigarh	178	183	194	217	265	278	284	299	308	314	317	306
Shillong	166	175	183	208	257	274	268	284	296	311	311	293

Source: Central Statistical Organisation, New Delhi

Index Numbers of Security Prices—All-India
(Week ended Saturday)

(Base: 1970-71 = 100)

Item	Weight	1979 MAY	JUNE					JULY				A year ago
		26	2	9	16	23	30	7	14	21	28	
Government and Semi-government Securities												
(Total: a+b+c)	**100.0**	**97.8**	**97.7**	**97.7**	**97.7**	**97.7**	**97.7**	**97.6**	**97.6**	**97.6**	**97.5**	**97.6**
a. Government of India	74.7	96.9	96.9	96.9	96.8	96.8	96.8	96.8	96.8	96.6	96.6	96.8
b. State Governments	19.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99 8	99.8	99.7
c. Semi-Government Institutions	5 6	101.9	101.9	101.9	101.9	101.9	101.9	101.9	101.9	101.9	101.9	102.0
Debentures of Joint Stock Companies												
All Industries	**100.0**	**90.2**	**90.1**	**90.1**	**90.1**	**90.1**	**90.1**	**90.1**	**90.1**	**90.1**	**90.1**	**89.3**
Preference Shares												
All Industries	**100.0**	**82.1**	**82.0**	**82.0**	**82.1**	**82.0**	**82.0**	**81.8**	**81.1**	**80.9**	**80.9**	**80.9**
Ordinary Shares												
All Industries	**100.0**	**147.9**	**146.6**	**147.8**	**149.0**	**147.8**	**145.5**	**144.7**	**142.4**	**142.5**	**142.5**	**125.8**
of which:												
Tea Plantations	2.2	252.5	250.0	249.5	245.2	245.0	239.9	235.8	237.9	239.7	241.4	247.7
Cotton Textiles	9.7	141.6	140.6	139.9	142.3	144.0	139.2	138.5	135.7	135.9	135.7	111.5
Jute Textiles	0.9	121.2	118.6	117.8	117.0	115.2	113.2	115.1	117.8	119.1	124.0	69.6
Silk, Woollen and Rayon Textiles	6.2	185.0	182.7	185.1	187.6	187.9	186.8	185.5	181.5	181.0	181.7	154.0
Aluminium	3 8	72.8	73.6	74.6	74.9	73.9	73.2	71.2	70.3	70.1	70.1	58.7
Transport Equipment	5.4	139.2	138.1	142.0	143.2	139.1	133.5	132.1	130.2	131.1	130.2	101.1
Electrical Machinery, Apparatus, Appliances etc.	6.5	148.7	146.7	147.9	149.1	149.7	147.6	147.2	146.4	144.0	142.3	121.5
Chemical Fertilisers	3.6	209.8	205.9	207.3	211.6	209.4	206.6	205.2	201.1	201.5	200.6	205.4
Cement	3.6	162.9	162.2	162.3	163.1	162.7	159.0	158.2	157.3	156.0	154.2	142.6
Paper and Paper Products	3.3	178.7	177.5	177.0	179.0	178.8	178.3	176.3	173.5	172.4	172.0	153.0
Rubber and Rubber Poducts	3.4	75.0	73.7	73.1	73.4	72.9	71.8	69.8	68.6	68.2	65.2	50.4
Electricity Generation and Supply	2.2	76.8	76.2	76.5	76 8	77.7	78.1	78.3	79.3	80.2	80.3	82.3
Shipping	2.0	120.5	125.2	131.5	134.1	131.7	129.5	133.2	134.1	138.1	140.7	92.2

Source: Reserve Bank of India.

Bullion Prices (Spot)--Bombay
(As on Friday unless otherwise indicated)

(In rupees)

	1979 MAY	JUNE					JULY				AUGUST			1978 August
	25*	1*	8	15	22	29	6*	13	20	27	3	10	17	18*
Standard Gold (per 10 grams)														
Opening	987	988	985	990	976	966	985	996	993	1,004	1,009	1,018	1,065	746
Closing	992	988	983	988	973	964	987	996	998	1,006	1,009	1,018	1,080	744
Silver (per kilogram)														
Opening	1,643	1,649	1,648	1,606	1,600	1,567	1,625	1,682	1,724	1,709	1,696	1,754	1,717	1,401
Closing	1,637	1,665	1,641	1,585	1,606	1,580	1,626	1,700	1,700	1,706	1,710	1,762	1,738	1,400

*Prices relate to Thursday, Friday being a holiday.

Source: Bombay Bullion Association Ltd.

All Scheduled Commercial Banks—Business in India
(As on last Friday)

(Amounts in Rs crores)

Item	1970-71	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979				A year ago
								April	May	June	July	
1. Aggregate Deposits												
(Total : a+b)	**5,906**	**10,139**	**11,827**	**14,155**	**17,566**	**22,211**	**27,001**	**26,993**	**27,318**	**27,869**	**28,480**	**23,389**
(a) Demand Deposits	2,626	4,336	4,963	5,817	6,943	8,867	10,438	10,182	10,298	10,381	10,681	8,867
(b) Time Deposits	3.280	5,803	6,864	8,338	10,623	13,344	16,564	16,811	17,020	17,488	17,799	14,522
2. Borrowings from Reserve Bank†	**368**	**409**	**473**	**798**	**967**	**331**	**546**	**387**	**506**	**659**	**748**	**207**
3. Cash in Hand and Balances with Reserve Bank												
(Total : a+b)	**364**	**856**	**908**	**912**	**1,500**	**2,143**	**3,189**	**3,374**	**3,455**	**3,457**	**3,500**	**2,259**
(a) Cash in Hand	167	246	296	305	354	469	555	554	576	602	590	471
(b) Balances with Reserve Bank††	197	610	611	607	1,146	1,674	2,634	2,819	2,879	2,855	2,910	1,788
4. Investments												
(Total : a+b)				**4,607**	**5,536**	**7,897**	**9,109**	**9,400**	**9,321**	**9,418**	**9,599**	**8,340**
(a) Government Securities*	1,362	2,362	2,826	3,283	3,930	5,907	6,621	6,899	6,775	6,908	7,039	6,239
(b) Other Approved Securities				1,324	1,606	1,990	2,488	2,501	2,546	2,510	2,560	2,101
5. Bank Credit												
(Total : a+b+c)	**4,684**	**7,399**	**8,762**	**10,877**	**13,173**	**14,939**	**17,777**	**17,881**	**18,131**	**18,538**	**19,268**	**15,362**
of which :												
5.1 For Financing Food Procurement Operations@	214	367	613	1,521	2,190	1,984	2,210	2,207	2,581	2,996	2,987	2,481
(a) Loans, Cash-Credits and Overdrafts	3,708	5,994	7,106	8,527	11,411	12,708	15,296	15,352	15,656	16,210	16,977	13,503
(b) Inland Bills Purchased and Discounted**	765	1,037	1,271	1,852	1,155	1,576	1,668	1,678	1,633	1,538	1,489	1,243
(c) Foreign Bills, Purchased and Discounted	211	367	385	498	607	655	813	853	842	790	802	616
6. Cash-Deposit Ratio												
(3) as per cent of (1)	6.2	8.4	7.7	6.4	8.5	9.6	11.8	12.5	12.6	12.4	12.3	9.7
7. Investment-Deposit Ratio												
(4) as per cent of (1)				32.5	31.5	35.6	33.7	34.8	34.1	33.8	33.7	35.7
(4a) as per cent of (1)	23.1	23.3	23.9	23.2	22.4	26.6	24.5	25.6	24.8	24.8	24.7	26.7
8. Credit-Deposit Ratio												
(5) as per cent of (1)	79.3	73.0	74.1	76.8	75.0	67.3	65.8	66.2	66.4	66.5	67.7	65.7

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† As available in the Reserve Bank records.

†† As per the statement of Affairs of the Reserve Bank of India with effect from July 6, 1973.

* At Book Value; including Treasury Bills and Treasury Deposit Receipts, etc.

** Excludes Bills re-discounted with Reserve Bank of India.

@ Figures relate to Advances of Indian Scheduled Commercial Banks. With effect from week ending June 17, 1977 such advances by Foreign Scheduled Commercial Banks are also included.

Note : Individual figures may not, in all cases, add up exactly to total due to rounding off.

Analysis of Money Stock Measures

(As on last Friday)

(Rs crores)

Sl. No.	Item	1970-71	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979 April	May	June	July	A year ago
	MONEY STOCK MEASURES (M_1 and M_3)												
1.	**Money Supply (M_1)** (Total : a+b+c)	7,321	11,172	11,911	13,143	15,609	18,383	21,837	21,908	22,398	22,643	22,967	18,984
	(a) Currency with the Public	4,367	6,308	6,348	6,704	7,873	8,631	10,209	10,662	10,974	11,134	11,136	9,046
	(b) Bank Money (=Demand Deposits with Banks)	2,910	4,819	5,485	6,385	7,636	9,683	11,426	11,167	11,276	11,373	11,678	9,783
	(c) Other Deposits with Reserve Bank*	44	45	78	54	100	70	202	79	148	136	153	155
2.	**M_3 (=M_1+Time Deposits with Banks)** (Total: 1+7a)	10,958	17,571	19,462	22,286	27,279	32,905	39,823	40,155	40,865	41,605	42,237	34,808
	SOURCES OF CHANGE IN M_1												
3.	**Net Bank Credit to Government** (Total : a+b)	5,264	8,726	9,533	10,112	11,022	13,470	15,391	15,948	16,516	16,885	17,199	14,105
	(a) RBI's Net Credit to Government	3,807	6,234	6,570	6,697	6,926	7,387	8,568	8,842	9,516	9,748	9,919	7,673
	(b) Other Banks' Credit to Government	1,457	2,492	2,963	3,414	4,096	6,083	6,823	7,106	7,000	7,137	7,280	6,432
4.	**Bank Credit to Commercial Sector**** (Total : a+b)	6,455	10,701	12,647	15,392	18,503	21,222	25,342	25,401	25,675	26,084	26,831	21,945
	(a) RBI's Credit to Commercial Sector	125	562	652	721	887	954	1,248	1,229	1,216	1,220	1,216	1,068
	(b) Other Banks' Credit to Commercial Sector	6,330	10,139	11,995	14,671	17,617	20,268	24,094	24,172	24,459	24,864	25,615	20,877
5.	**Net Foreign Exchange Assets of Banking Sector**	559	674	392	1,094	2,471	4,462	5,436	5,608	5,664	5,565	5,581	4,556
6.	**Government's Net Currency Liabilities to the Public**	384	502	531	555	568	593	592	589	592	595	593	602
7.	**Non-monetary Liabilities of Banking Sector** (Total : a+b+c)	5,341	9,431	11,192	14,009	16,955	21,363	24,924	25,638	26,049	26,486	27,237	22,224
	(a) Time Deposits with Banks@	3,637	6,399	7,551	9,143	11,671	14,522	17,986	18,247	18,467	18,962	19,270	15,824
	(b) Net Non-monetary Liabilities of RBI	714	1,437	1,670	2,577	2,833	3,452	3,312	2,892	3,257	3,388	3,582	2,887
	(c) Residual (Derived)	990	1,595	1,971	2,289	2,451	3,390	3,626	4,499	4,325	4,136	4,385	3,513
8.	**M_1 (Money Supply)** (3+4+5+6—7)	7,321	11,172	11,911	13,143	15,609	18,383	21,837	21,908	22,398	22,643	22,967	18,984

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* Excluding Balances held on I.M.F. Account No. 1, Reserve Bank of India Employees' Provident Fund, Pension Fund and Co-operative Guarantee Fund and some extraordinary items. The amounts collected under the Additional Emoluments (Compulsory Deposit) Act, 1974 and the Compulsory Deposit Scheme (Income Tax Payers) Act, 1974 are also excluded since August 16, 1974 and December 13, 1974 respectively.

** Includes Public Sector Enterprises.

@ Relate to Time Deposits of Scheduled and Non-Scheduled Commercial Banks, State Co-operative Banks, Central Co-operative Banks and Primary Co-operative Banks.

Note : Individual figures may not, in all cases, add up exactly to total due to rounding off.

The Course of Indian Industrial Production : 1970-1979

(Index Numbers with Base: 1970 = 100)

Code No.	Description	Weight	1971	1972	1973	1974	1975	1976	1977	1978 (R)	1979			
											Jan. (R)	Feb. (P)	March (P)	April (P)
	GENERAL INDEX (CRUDE)	**100.00**	**104.4**	**110.6**	**111.1**	**113.1**	**119.7**	**131.4**	**138.3**	**147.8**	**158.6**	**152.5**	**167.4**	**145.9**
1.	**Mining and Quarrying**	**9.69**	**101.0**	**105.0**	**107.0**	**113.2**	**127.6**	**136.8**	**139.9**	**142.1**	**169.0**	**160.0**	**181.0**	**142.0**
2-3.	**Manufacturing**	**81.08**	**104.5**	**110.5**	**111.2**	**111.9**	**116.6**	**127.5**	**135.1**	**144.4**	**152.5**	**148.6**	**161.5**	**140.6**
20.	Food Manufacturing Industries except Beverage Industries	7.74	98.1	101.1	96.8	97.8	105.6	110.5	118.4	138.5	167.7	162.6	178.7	167.7
21.	Beverage Industries	0.69	117.0	163.5	193.8	142.4	174.5	298.9	347.0	387.9	308.4	292.2	293.0	308.4
22.	Tobacco Industries	2.21	104.5	98.6	101.9	99.7	96.1	106.6	107.7	112.5	137.7	122.0	118.2	137.7
23.	Manufacture of Textiles	17.43	100.0	105.5	104.1	102.6	102.0	105.6	103.3	109.7	104.7	99.5	118.5	104.7
24.	Manufacture of Footwear, Other Wearing Apparel etc.	0.34	99.5	85.1	92.5	89.9	90.9	90.6	80.4	73.1	80.1	83.3	81.2	80.1
25.	Manufactare of Wood and Cork except Furniture	0.49	112.6	114.0	50.4	103.2	110.4	114.2	131.4	124.0	122.7	122.7	122.7	122.7
27.	Manufacture of Paper and Paper Products	2.24	104.3	107.7	109.2	116.1	109.8	110.7	112.8	121.0	123.3	119.0	127.1	123.3
29.	Manufacture of Leather and Fur Products except Footwear etc.	0.32	93.6	100.4	115.0	109.3	124.2	110.7	104.2	71.6	67.5	61.9	61.9	67.5
30.	Manufacture of Rubber Products	2.22	108.9	114.2	112.7	121.0	122.6	122.7	127.9	143.2	150.0	146.5	144.7	150.0
31.	Manufacture of Chemicals and Chemical Products	10.90	112.2	124.9	126.7	123.0	131.7	155.5	171.6	182.6	192.9	190.9	198.4	192.9
32.	Manufacture of Products of Petroleum and Coal	1.62	106.2	106.0	111.4	113.0	119.1	124.8	132.7	141.0	156.0	134.6	161.8	156.0
33.	Manufacture of Non-metallic Mineral Products except Products of Petroleum and Coal	3.33	109.7	116.5	117.6	118.1	124.4	139.1	147.4	152.4	165.4	148.6	158.3	165.4
34.	Basic Metal Industries	8.84	102.8	112.3	102.2	104.2	115.4	137.9	144.8	144.9	146.7	139.2	156.0	146.7
35.	Manufacture of Metal Products except Machinery and Transport Equipment	2.77	105.5	114.9	107.6	122.0	126.4	133.7	137.0	154.9	167.2	166.1	165.0	167.2
36.	Manufacture of Machinery except Electrical Machinery	5.55	115.7	121.0	144.1	152.9	159.6	164.8	179.8	202.2	217.2	224.6	227.2	217.2
37.	Manufacture of Electrical Machinery, Apparatus, Appliances and Supplies	5.30	105.4	115.0	113.3	113.1	120.2	126.5	145.5	151.1	180.7	181.0	205.0	180.7
38.	Manufacture of Transport Equipment	7.39	100.0	99.1	109.7	109.0	111.9	122.3	124.5	124.6	131.3	135.2	155.6	131.3
39.	Miscellaneous Manufacturing Industries	1.70	95.7	89.0	83.9	78.3	71.9	72.9	99.9	133.4	122.2	114.1	107.3	122.2
5.	**Electricity**	**9.23**	**107.2**	**116.8**	**114.8**	**124.1**	**138.0**	**160.0**	**165.4**	**183.6**	**201.0**	**179.1**	**204.7**	**196.3**

(P) Provisional. (R) Revised.

Note : Figures now published supercede earlier figures.

Source: Central Statistical Organisation.

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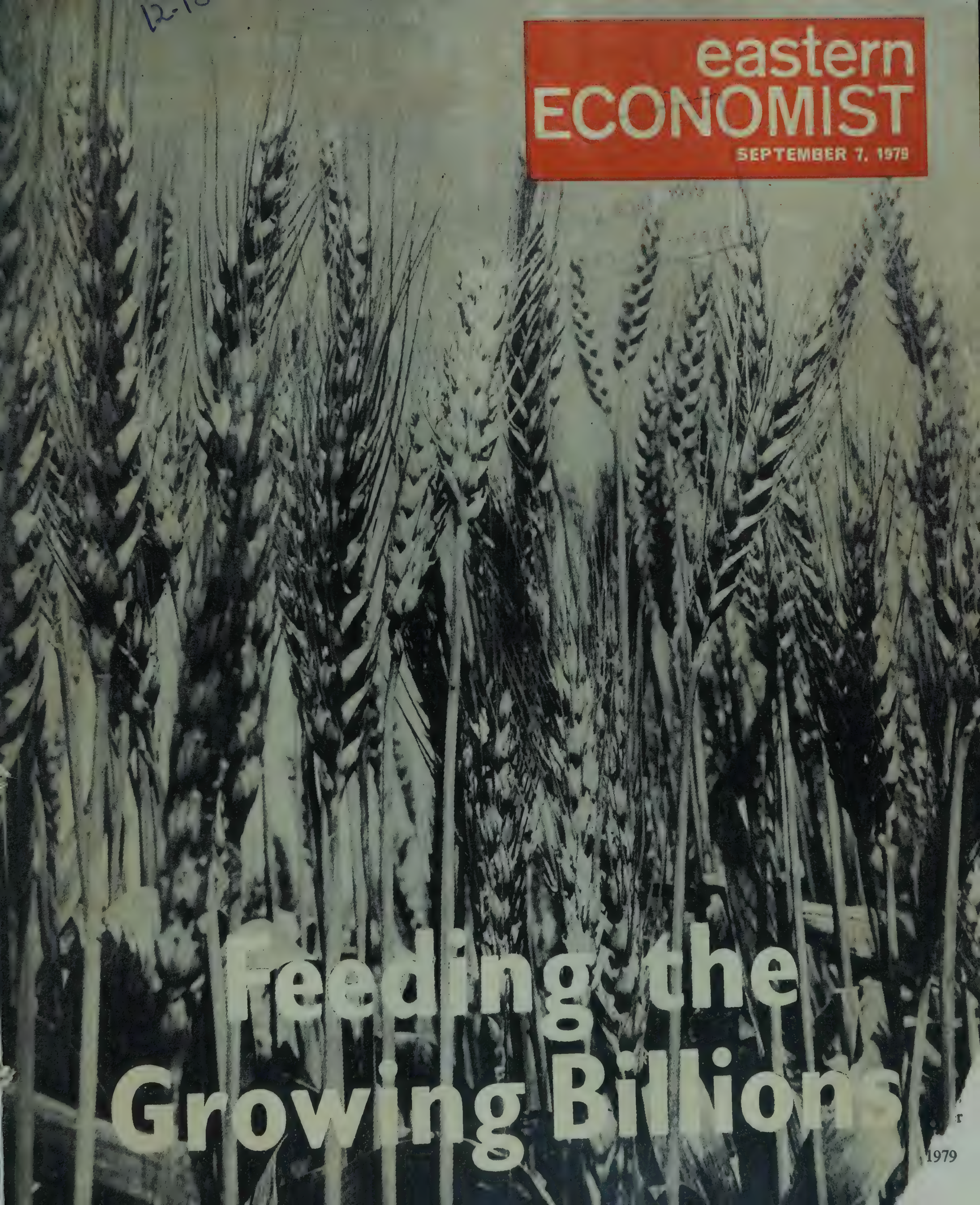

Feeding the Growing Billions

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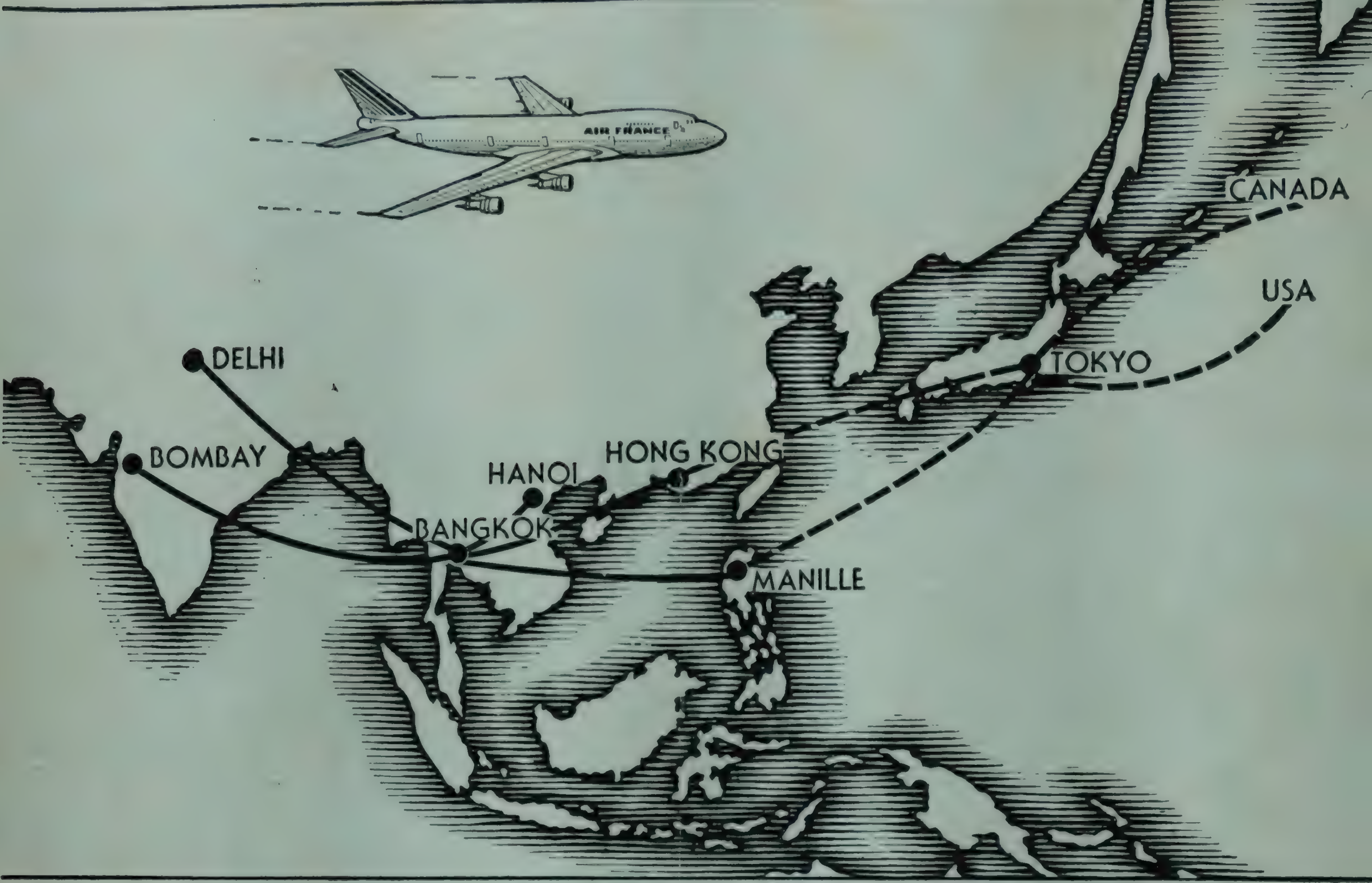

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Adroit — 1761

An election sop?

THE VARIOUS steps announced by the central government last week to augment the availability of cheaper varieties of cloth and to bring down their prices through reductions in trade margins, no doubt, should help the vulnerable sections of society in meeting their textile requirements at reasonable prices during the ensuing festival season. But opinions are bound to differ on the real objective of the present caretaker government at the centre in arriving at these decisions. Notwithstanding the fact that the recent stability in the prices of cotton and its easy supply position following the last year's bumper crop, have been of significant assistance to the units manufacturing the cheaper varieties in containing their production costs, the programme announced entails some addition to the subsidies which have to be provided either by the central government—to the handloom sector (Rs 3 crores more)—or by the consumers of the superior varieties of cotton or mixed fabrics. It is on this score that exception has been taken in some circles to the above announcement. These circles see in this a move of Mr Charan Singh's government to win over the vulnerable sections of society for his party and proposed allies during the December Lok Sabha polls.

The subsidy payable to handloom weavers has been raised from rupee one to Rs 1.25 per sq. metre of cloth. Advances are to be provided to the state agencies (state handloom corporations/apex co-operatives) to the extent of 25 per cent of their firm production programme requirements relating to janata cloth. These measures have been taken to enable the handloom sector to step up its output of janata cloth to 30 milllon metres during the current quarter. It is claimed that this will provide employment for about 60,000 persons mainly in the rural areas. The bulk of this production, consisting predominantly of sarees and dhoties, it is expected, will be available for distribution during the ensuing festival season. The additional availability of handloom cloth in this season is anticipated to be of the order of three million metres.

The National Textile Corporation (NTC), which runs over 107 sick textile manufacturing mills taken over by the government, is to release with immediate effect 40 million metres of controlled cloth for distribution through the retail outlets of the National Consumer Cooperative Federation and the state cooperative federations. This quantity is said to have already been manufactured and packed by the NTC and consists of sarees, dhoties, long cloth, shirting, drill and tussore. The NTC mills will also produce another 10 million metres of controlled cloth for distribution during the festival season. Thus, an additional 53 million metres of controlled/janata cloth will be available during the festival season from the NTC mills and the handloom sector. The total availability of controlled/janata cloth for meeting the festival requirements is expected to be around 175 million metres.

The third major decision announced has been that the trade margins on the cheaper varieties of cloth whose maximum ex-mill price does not exceed Rs 4.75 per metre are to be brought down from over 40 per cent at present to 25 per cent, inclusive of freight and octroi. The entire quantity of controlled janata cloth is to be sold at the existing prices ranging between Rs 2 and Rs 3 per metre. For the other varieties of cloth in respect of which ex-mill prices are being stamped on every metre, the existing system is to continue. In order, however, to ensure that the cheaper varieties to cotton/viscose cloth are available to the common man throughout the country at uniform prices, trade margins are to be brought down from over 40 per cent to 25 per cent, inclusive of freight and octroi, on all varieties whose maximum ex-mill price does not exceed Rs 4.75 per metre. All these varieties will be available to consumers from the middle of this month within the price of Rs 6.36 per metre, inclusive of excise duty, yarn duty, taxes and trade margins. The all-inclusive maximum prices will be stamped on every metre of cloth.

In order to ensure that cheaper varieties are available within the price range indicated above, it has been decided that the private sector and NTC mills will manufacture 1,000 million metres, during the year—200 million metres more than estimated earlier. Those mills which are not manufacturing such low-priced varieties are to be asked to ensure production of such varieties either by themselves or through others so that the availability of cheaper varieties is augmented by active participation of all the mills.

Since the trade margins on the cheaper varieties are to be reduced, the possibilities of the prices of the other varieties, predominantly used by the so-called more affluent sections of society, being raised are not ruled out.

The overall production of the controlled, janata and the cheaper varieties of cloth this year is expected to be around 1,600 million metres—1,000 million metres of cheaper varieties, 400 million metres of controlled cloth produced by the organised sector and 200 million metres of janata cloth produced by the handloom sector.

The sale of the price-stamped cloth has been brought within the purview of the Essential Commodities Act.

South India's food outlook

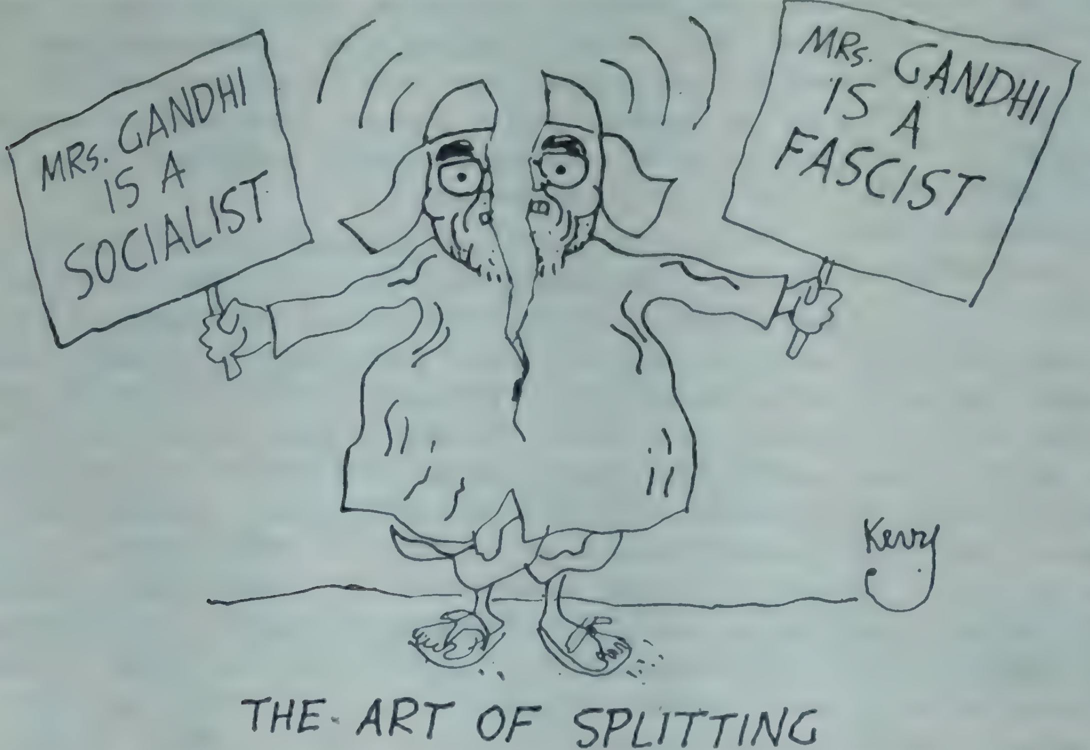
AFTER THREE successive agricultural seasons during which bumper food crops have been harvested, the outlook for the current kharif crop in many parts of the country has become uncertain following the delayed onset of the monsoon and the recent prolonged dry spell. The disastrous cyclone which hit the Andhra coast between Ongole and Vijayawada in May this year unusually, when it should have deflected eastward and crossed into Bangladesh or the Arakan coast, would appear to have upset the pattern of rainfall during the period of the south-west monsoon in the southern region and the north-east monsoon in north India. The defeciency in rainfall in June-August this year has been pronounced in Andhra Pradesh in the southern region, the coastal areas being deficient to the extent of 15 per cent and Telengana 31 per cent. Fortunately, rainfall has been satisfactory in Karnataka though there were earlier apprehensions that part of north Karnataka may again be affected. In Tamil Nadu too, the Chinglepattu and North Arcot districts have been adversely affected. Only latterly there have been beneficial rains and it is hoped that agricultural production can be maintained at a high level with a satisfactory power situation and adequate storage in the Mettur reservoir.

With good progress recorded in regard to the execution of irrigation schemes in Andhra Pradesh and Karnataka and the energisation of pump-sets in a big way in Tamil Nadu, the agricultural sector has been considerably strengthened. With Kerala too making good progress in food production, the southern region as a whole had even a modest surplus last year. The last occasion when severe drought was experienced in Andhra Pradesh and Karnataka was in 1973 and in Tamil Nadu in 1969.

heavy expenditure

It was then necessary to incur heavy expenditure on relief operations and a total sum of over Rs 100 crores was spent by the three states for giving succour to the people in the drought-affected areas. The loss in the output of food crops was well over three million tonnes. As buffer stocks were not sizable in those days and there was also dependence on imports, the quantities of gains required for relief operations had to be transported over long distances and were not also available in the required volume. The situation is now vastly different and huge quantities of wheat and rice can be pumped in the deficit regions apart from accelerating the food-for-work programme.

The calamity that has befallen Andhra Pradesh is felt acutely because the drought has followed the earlier cyclone havoc. There may not be a repetition of the happenings of 1973 when all the 21 districts were affected and the Rayalaseema and Nizamabad districts, the granery of Telengana, lost nearly the whole of their food production. It is now proposed to carry out relief operations at a cost of Rs 20 crores for providing employment to farm labour. The food-for-work programme also will be intensified and the centre has been requested for an additional allotment of 65,000 tonnes of foodgrains. There is no precise estimate of the loss that would be sustained by farmers. But a grim picture has been painted by the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THE ART OF SPLITTING

state's chief minister, Dr Chenna Reddi, as it has been stated that 75 per cent of the dry crops have been lost even though only 80 lakh acres were cultivated out of 130 lakh acres. The area under wet cultivation also has shrunk to 30 lakh acres from 65 lakh acres. However, during this period of the monsoon, large crops are not usually raised and a disastrous decline in the yield of food and cash crops can be avoided if the north-east monsoon in the southern region behave normally in October-December. The drop in food production in all the four states may not be more than 1.5 million tonnes, the bulk of the decline being on account of Andhra Pradesh.

This decrease in production by itself may not create a net deficit in Andhra Pradesh as it has usually a surplus of over one million tonnes of rice. Even after making this contribution to the central pool in the last agricultural season, there were large quantities left with the farmers as procurement operations were not brisk enough. These stocks have not been completely exhausted and millers and traders must be having sizable holdings. In any case, massive releases can be effected from stocks held by the Food Corporation in the region and there is no need for apprehension that the requirements of the population cannot be met adequately and speedily. While drought relief operations can be carried out expeditiously and the deficiencies in food production in several states can be overcome with the required draft on buffer stocks, the setback suffered by Andhra Pradesh may slow down, albeit temporarily, the pace of economic development. However as the state government is placed in a strong position and there can be quick recovery in the later half of the financial year, in the event of a satisfactory north-east monsoon, authorities should be alert and adopt new methods for overcoming the ravages of drought which is not likely to be of the dimension of 1973.

Towards self-reliance in rubber

IN A bid to accelerate the progress towards attainment of self-sufficiency in rubber, the central government has cleared the Rubber Board's scheme for encouraging new plantings in the small-scale sector. An allocation of Rs 4.5 crores has been made to provide subsidy under the scheme which will help the small growers to carry out new plantings of rubber trees in 4,000 hectares during the current calendar year. When these plantings mature, they will increase the output of natural rubber by 4,800 tonnes per annum. The employment potential of the current year's programme is said to be full-time absorption of 2,800 workers.

If the ultimate aim of attaining self-sufficiency is to be accomplished, the scheme obviously will have to be continued for some years. Perhaps it is felt that allocation should be made from year to year after periodical reviews.

Currently the rubber plantations in the country are spread over 250,000 hectares. The production this year is estimated to reach 155,000 tonnes. As this is considered insufficient to meet the growing demand, even after taking into consideration the output of synthetic rubber, imports to the order of 45,000 tonnes of natural rubber have been sanctioned this year. Small holdings presently account for about 71 per cent of the total acreage under rubber and 63 per cent of the total output. It is felt that the success of the natural rubber production programme in the future depends largely on new plantings on small holdings.

The scheme envisages grant of a package of incentives to small rubber growers, including new entrepreneurs, for undertaking new plantings on scientific lines in areas identified by the Rubber Board. The traditional rubber growing areas are Kerala, Tamil Nadu and Karnataka. Tripura, Assam, Meghalaya, Andaman and Nicobar Islands, Goa and Maharastra are considered suitable non-traditional areas.

capital subsidy

The incentives envisaged under the scheme include a capital subsidy on a graded scale, the maximum of which would amount to Rs 7,500 per hectare. The maximum rate would be applicable to those small growers whose total extent of rubber cultivation, including the new plantings carried out under the scheme, would not exceed two hectares. Other small growers whose aggregate rubber plantation would be more than two hectares but would not exceed 20.23 hectares will be eligible for capital subsidy at the rate of Rs 5,000 per hectare. The Rubber Board's estimate of the total cost of new plantings and their maintenance over a seven year period up to the bearing stage of one hectare of rubber plantation is Rs 15,000. The subsidy would be paid in seven yearly instalments each year's instalment being disbursed after the prescribed items of work are completed by the grower to the satisfaction of the board.

Growers owning upto six hectares of rubber plantation and who participate in the scheme will be provided additional incentives by way of reimbursement of

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Eastern Economist 30 Years Ago

SEPTEMBER 9, 1949

The Prime Minisler's blunt assessment in his address on September 3, to students of Allahabad University that "talk about Hindu culture and Hindu Rashtra was fantastic" has natually been received with very mixed feelings. There are not wanting signs that the basis of the secular democratic State, of which the Prime Minister is the prime exponent, is being assailed publicly and privately by the sentiment, certainly wide spreed, that India's decline has followed upon the abandoment of the hcritage of Hindu culture whice marked this country's tremendous ascendance in the past. It has been eassy to awaken this sentiment in the context of our new nationalism; for one thing, it can awaken pride and pride is a condition of nations free; for another, it affords a ground of assertiveness against the aggressive miltancy of Pakistan's Istamic faith; and it provides for many minds the natural reconciliation between the aggressive nationalism of the present and the glory that is past.

cost of high-yielding planting materials used for new plantings, supply of fertilisers required for the new plantations at 50 per cent subsidised cost and a soil conservation subsidy of upto Rs 150 per hectare.

Participating growers will receive free extension support from board's field staff at all stages of planting and maintenance. High-yielding vareties of planting materials would also be supplied to them from board's nurseries.

In order to provide liquidity to the growers for undertaking new planting operatians on their own, until the subsidies become payable, a credit component will also be added to the package of assistance. The credit financing, which will take care of the entire cost of planting and maintenance upto maturity, is likely to come under the Agricultural Refinance and Development Corporation's programme and will be channelled through selected banks operating in the plantation areas. The loan will also be disbursed in seven annual instalments, regulated according to the actual requirements of advance cash for each year. The loan together with the interest thereon will become repayable in six easy instalments from the tenth year of planting, i.e. after the new plantation has become fully remunerative. Interest on the loan will be subsidised by the board so that the effective rate payable by the growers will be kept down to not more than nine per cent. The details in this regard would be worked out by the board soon in consultation with the ARDC.

reduced liability

Growers who avail of the credit facility will have the subsidies due to them under the scheme paid to their bank account whereby their repayment liability will stand correspondingly reduced.

The scheme will be financed from the rubber cess fund. The new plantations would in turn contribute to the cess fund at the rate of over Rs 10,000 per hectare during their entire life period. The current rate of cess levied is 40 paise per kilogram of rubber produced in the country and this is collected at the consumers' end. One hectare of high-yielding plantation can yield 25 to 30 tonnes of rubber over its whole productive period of 25 years.

Endeavours are also being made to improve the yields in the rubber plantations from around 800 kgs per hectare at present to 1,000 kgs through popularising intensive production practices. It is hoped that the total production of natural rubber in the course of the next two years will be raisd to 200,000 tonnes. Techniques are also being developed for reducing the immaturity period of rubber trees to four years from seven years. The most important among the innovations to be adopted in this regard is the use of advanced planting materials.

Cement from south

THE CEMENT units in the southern region account for 35 per cent of the capacity of all units in the country and the claim can be proudly made that good use of the existing facilities is being made by nearly all units. When there is an acute shortage of cement and imports have to be secured for filling the gap at a cost which is higher by 25 per cent; even without taking into account the excise duty on indigenous cement, it is distressing that the operations of cement producers in Karnataka and Tamil Nadu particularly have been affected by shortage of coal. With a view to ensuring adequate supplies to the thermal stations, the linkage with coalfields for the cement industry in the region has been conceived in an impracticable manner. Only part of the requirements of cement units are made available by the Singareni group of collieries and the balance has to be obtained from West Bengal and Bihar through the Haldia port.

The difficulties in loading ships at Haldia has upset the calculations of the Tamil Nadu Electricity Board in ensuring coal supplies through the sea route. The Tuticorin thermal station may encounter serious problems when all the three giant generating sets start functioning by the end of 1980. The requirement will easily be two million tonnes annually. The fears about regular supplies being received through Haldia have even compelled the electricity board to explore the possibilities of importing coal from Australia! The thermal stations need only non-coking coal supplies which can be had in plenty from indigenous sources as there are vast reserves in several regions.

shortage of coal

The inadequate supplies of coal through the Tuticorin port for cement units in the southern districts of Tamil Nadu have compelled several producers to use oil in order to avoid a drastic cut back in production. As the subsidy for using oil during the periods of coal shortage is still available, the cement producers consider it advisable to keep the kilns going even if the additional cost involved in using this fuel is not fully recovered. In spite of the serious attempts made to maintain production at high levels, there was heavy loss of clinker output in July following the strike for a short period by loaders at the Singareni collieries. As the output of western coalfields is mainly earmarked for Maharashtra, Gujarat and other regions in the west, any shortfall in production in the Singareni-Ramagundam coal belt has an upsetting effect on th operations of industries in the southern region. The effect of the prolonged strik of last year in the same area is still to b overcome and it is now wondered whether it would be advisable to promot new units in Tamil Nadu and Karnatak even if adequate limestone deposits wer available.

The capacity of the cement units i Tamil Nadu has not increased significant in recent years after the completion of th expansion plan of Tamil Nadu Cemen in the first phase and the commissionin of large sized dry process plant of Madr Cement. India Cements, Dalmia Cemen and Chettinadu Cement have not expan ed their capacity and there are also immediate proposals for implementi new schemes mainly because of the un munerative character of fresh investme until recently. Only after the introducti of the three-tier system of retention pri the anomalies relating to the computati of retention prices on the basis of le from collieries for drawing supply ha been eliminated. If the new policy is p perly implemented, there may be p paredness to start new cement plants or implement expansion schemes though a satisfactory answer will have to be provided for relieving the coal bottleneck.

The immediate problem in Karnataka, of course, is to have adequate power for the cement units. In view of the adequacy of power in Tamil Nadu and the limitations to the export of power from Kerala directly from Idukki to Karnataka, the needs of cement units in the latter state should be ensured by routing power supply through Tamil Nadu. With the full supplies of coal to Tamil Nadu units and adequate power supply to Karnataka units there can be an increase in cement output by over 300,000 tonnes annually.

unexploited deposits

Fortunately, Andhra Pradesh has no shortage of power or coal and the existing capacity of 2.3 million tonnes of cement capacity of the state can be fully utilised. There are still large unexploited limestone deposits there. It is proposed to establish two new units having a capability of nine lakh tonnes each under the auspices of Orient Paper Mills and Coromandal Fertilizers in pursuance of their diversification programmes. It is also contemplated to erect several mini-cement plants having a capacity of 200 tonnes daily. When all these schemes fructify, the aggregate capacity of cement plants in the region may increase to nearly 5,000,000 tonnes, especially as some of the existing units are also implementing expansion schemes.

The scope of development of the industry in Andhra Pradesh, Karnataka and Tamil Nadu is, therefore, substantial. If mini-cement plants can be located in Tamil Nadu and Karnataka and expansion schemes also can be encouraged, it will be possible to achieve a sizable increase in cement output in the next three or four years. In view, however, of the railway bottleneck and competition from various sources for getting coal supplies from the strategically located Singareni-Ramagundam belt, the earlier scheme for facilitating coal movement by the rail-sea-route with the payment of the same freight rates should be revived. It will, of course, be necessary for Bihar and West Bengal to give the necessary cooperation, though there should also be facility for securing supplies from Orissa through the Pradeep port.

West Bengal labour scene

THOUGH THE labour situation in West Bengal, on the whole, remains satisfactory, there have been many disquieting developments and it is feared that in the coming weeks it is likely to deteriorate. Many large industrial units in recent months have been affected by prolonged strikes or lockouts and also by work stoppages and indiscipline in various forms. For instance, Hindustan Motors, the largest automobile factory in the country, has been under a lockout since June 24, 1979, and at the time of writing, there does not appear to be an early prospect of its reopening. The lockout became necessary because, according to the management, a section of workers was not cooperating in maintaining production and there had been several cases of deliberate go-slow and other kinds of disruptive tactics.

On the other hand, the labour leaders say that the lockout has been declared unjustly and not because of any trouble from workers. They point out that in 1978-79, the factory produced 20,882 cars which were about 1,000 more than in the previous year and that the output of trucks and other kinds of transport equipment was also higher. The unions have demanded reinstatement of dismissed workers, payment of 20 per cent bonus, withdrawal of all charge-sheets and suspension orders and permanancy of all temporary workers.

Whatever may be the real reasons, it indeed is strange that the state government has not shown any eagerness to settle this dispute at an early date. The factory employs over 14,000 persons and several hundreds of ancillary units depend on it for orders.

In the Garden Reach Ship-builders and Engineers Workshop, which employs about, 10,000 people, there was recently a strike which lasted for nearly 124 days. The strike in Liptons has been continuing since April 16 this year. Labour unrest

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IN THE NATION 479-484
The Election Sop ?
South Indian Food Outlook
Towards Self-Reliance In Rubber
Cement from South
West Bengal Labour Scene
North-Eastern States' Woes

WINDOW ON THE WORLD 485-488
Britain : Perks Under Assault
US Tariff Cuts
Plantations in Sri Lanka
Malaysian Palm Oil

MOVING FINGER 489

COVER FEATURE 490
Feeding the Growing Billions

POINT OF VIEW
A Brave New Turn in Energy Crisis—*Sudhir Sen* 509
Social Audit and Resource Management —*Prof. Sripati Ranganadha* 512

TRADE WINDS 514

COMPANY MEETING
Modipon Limited 518

COMPANY AFFAIRS 521

RECORDS & STATISTICS 525
IDBI : A Year of Outstanding Performance

has also led to a lockout by the only cycle tyre manufacturing company in north Bengal since May 23 this year. In several other units—large, medium and small—industrial harmony has been marred by disputes and other incidents.

What is even more disturbing has been the worsening of the labour situation in the Calcutta port. Since the middle of last November, its working has been seriously disrupted by strikes or work-stoppages by labourers of various categories. There was a strike by port and dock workers from November 16 to 26 and from November 15 to January 13, 1979, there was a strike by bargemen. Besides, there have been strikes by lock-gate drivers, general-purpose mazdoors and dock workers. As a result, industry and trade have been put to heavy loss.

In the power sector also, the labour relations continue to be disturbed, which have been affecting generation and distribution. Meanwhile, the West Bengal State Electricity Board employees' union has given notice of its intention to go on strike from September 11 in support of their demands.

the guidelines

The guidelines, issued by the state government for the payment of bonus, it is feared, are likely to create more friction between workers and employees. They stipulate that minimum bonus of 8.33 per cent should be paid, regardless of profit or loss and irrespective of whether a unit is sick or healthy. The jute industry has been specifically urged to consider the payment of bonus at a higher rate than the minimum. These guidelines may create tension and trouble in many industries whose working has been severely affected by the prolonged power cuts and other factors.

The government's anxiety to secure bigger benefits for labour is understandable. But it should also give due regard to the industry's capacity to pay. It should also create such conditions as will enable industries to increase production and improve their profits. A spokesman of the West Bengal Industrial Development Corporation disclosed a few days ago that new investment proposals in the state continued to show a declining trend in 1978-79. He also pointed out that the new incentive scheme of the state government, which came into force from October 1, 1978, had not evoked much response. In these circumstances, shuld not the state government's labour policy, while protecting and promoting the interests of workers also give due regard to the need for maintaining industry's viability and for improving the climate for investment ?

North-eastern states' woes

AT THE meeting of the North-Eastern Zonal Council, which was held in Shillong in the last week of August under the chairmanship of Mr L.P. Singh, the governor, concern was expressed at food shortages emerging in the region in the near future. The meeting discussed several problems relating to the supply of essential commodities like cement and steel and it was recommended that proper arrangements should be made to ensure their timely and adequate availability. The governor pointed out that economic development in this region was taking place rapidly. He therefore, stressed the urgent need to provide it with all the necessary inputs. He also suggested that the general commercial considerations should not be followed while making arrangements for the flow of various commodities into this region.

The meeting was attended by the Cement Controller, Steel Conttoller, regional manager of the Food Corporation of India, the managing director of the Inland Water Transport Corporation, and the representatives of the North Frontier Railways. All of them were reported to have expressed their willingness to look into the difficulties faced by the states of the region.

So far as the supply of essential commodities is concerned, it is necessary to associate the trade channels closely with the distribution arrangements so that the public can get their requirements without much difficulty. Most of the items have to be brought from outside the region and their proper supply can be ensured if the experience of the trade is fully utilised. For example, last year difficulties were faced by some states in the region in getting their requirements of vanaspati, which has always been in short supply. Some manufacturers were said to have been indifferent to the requests to open depots in these states. Similar problems were also faced in regard to the supply of automobile tyres and tubes. The associations of industry and trade in this region need to be strengthened so that they can effectively take up the grievances of businessmen and get them redressed. Apex bodies like the Federation of Indian Chambers of Commerce and Industry should take more interest in the problems faced by industry and trade in the north-eastern region and use their influence in New Delhi to ensure prompt and sufficient supplies of essential commodities.

The food production in many states of this region has shown some improvement in recent years. In Assam, the production of rice went up from 1,908,100 tonnes in 1971-72 to 2,281,000 tonnes in 1977-78, that of wheat from 48,000 tonnes to 84,000 tonnes, and of other cereals from 9,300 tonnes to 18,100 tonnes. In Meghalaya, in the same period, the output of rice rose from 108,000 tonnes to 130,500 tonnes, of wheat from 200 tonnes to 2,700 tonnes and of other cereals from 8,400 tonnes to 14,000 tonnes. Higher output has been recorded also in Manipur, Meghalaya and Nagaland.

plea for funds

Meanwhile, the central and the state governments should give greater attention to the development of infrastructure facilities like power and transport by road, river and waterways. The Planning Commission had sanctioned Rs 100 crores for the North-Eastern Council for implementing various schemes during the fifth Plan, of which over Rs 86 crores had been spent till March this year. The council has urged the Planning Commission to allot more funds during the sixth Plan period. The Commission should favourably consider this request and see to it that the funds are so spent as to benefit all the states in this region.

Britain: perks under assault

As a corollary to its policy of bringing down the rates of income taxation, the government in Britain is considering a strict monitoring of fringe benefits which are currently helping employees in the higher income brackets to reduce their tax liabilities. The first shot in this campaign has been fired by the Inland Revenue which released a consultative paper on this subject on August 17. This paper has singled out motoring perks for early review as they are held to account for about 80 per cent of the total value of fringe benefits. It is proposed that benefits in the form of company cars and petrol used for private motoring should be increased to a realistic rate. It is argued that the scale of notional value imputed to the benefit which employees enjoy by using company cars for private motoring is unrealistically low at present and the recommendation therefore is that the value of this benefit should be raised for the purpose of tax assessment. Again, as of now, this perk is not taxed at all in respect of earnings below £8,500. The consultative paper proposes that this threshold should be abolished. Another proposal is that a tax should be levied on petrol provided free to employees for private motoring.

The scheme envisages the implementation of these changes through employers adding the value of the benefits to wages and salaries each pay-day before deducting tax at source. These recommendations are stated to be the first phase of a projected government effort to have a close look at the whole field of perquisites both from the point of view of equity and safeguarding of government revenue. This appraisal, it is argued, has become necessary because of the growth in non-cash benefits as the inevitable result of a regime of high personal tax rates. With the Tory government now committed to a policy of reducing these tax rates, action is now considered necessary for discouraging their further growth and if possible to bring about a contraction since fringe benefits are inequitable and distort the employment market.

Between 1.5 million and two million company cars are believed to be used at present, with 500,000 provided for directors and higher paid employees and the remainder for employees earning less than £8,500. The present benefits scale brings in about £65 million in revenue annually. If the tax on this benefit is increased to a realistic level, an additional revenue of £115 million might be raised while the abolition of the earnings threshold would bring in further revenue estimated at roughly £180 million. If the government so desires these increases in receipts could be availed of by it for taking almost 1p off the 30p basic rate of income tax. The consultative paper discloses that the practice of companies paying for employees private motoring is now rapidly increasing and points out that, apart from this practice aggravating the inequity of using company cars for private pusposes, in terms of energy conservation, the absence of a tax charge on this fringe benefit runs counter to the principle that energy prices should give consumers accurate signals about the cost of energy supply and is a positive disincentive to containing the demand for oil.

The Inland Revenue has invited views on the amount and the timing of the introduction of a realistic scale of car benefits and the administrative problems in introducing a specific charge on the provision of petrol or oil. The initial reaction of the Confederation of British Industry is a qualified welcome to this fiscal attack on fringe benefits, the qualification being "it would be wrong to class every company car as a perk". Th *Financial Times* (London), however, ha extended enthusiastic support to th Inland Revenue proposals and writes a follows in the course of its editorial com ments : "Payment in kind rather tha cash is primitive and an undesirabl distortion of the market system, whethe it arises in barter trading between nation or in the remuneration of employees. S the steps suggested on Friday by th Inland Revenue to tax the benefit provi ed to the employees who use company cars in a more realistic way are entirely welcome. Now that income-tax rates have been reduced to tolerable levels, particularly at the top of the scale, it should be posssible for employers to offer incentives to hard work and ambition directly through higher pay. The proliferation of perks in recent years in Britain has led to a system of unhealthy addiction to high rates of taxation and restrictive income policies".

The Economist (London) is characteristically Delphic. It concedes that "the case against tax avoidance via perks is strong", but hastens to add "the case against perks themselves is only middling"—whatever this may mean. It argues that, although the Tory government has just brought down the top rate of personal taxation from 83 per cent to 60 per cent, the revised tax structure is in fact not very generous, to the £8,000-£10,000-a-year men "who are the backbone of British management". According to it, in the case of these employees, taxing company cars realistically could mean taking away with the left hand what has been given with the right. *The Economist* concludes that, while the case for taxing perks at their full value is a strong one, it is not open-and-shut. As a guide to policy-making, this assessment seems to be worth somewhat less than its weight in gold.

US tariff cuts

THE US trade policy sources claim that the cuts in tariffs resulting from the recently concluded Multilateral Trade Negotiations should significantly improve the competitive position of several products from India in the US market. If the over-all trade growth is positive in the coming years, as they expect, increasing volumes of these goods will probably be shipped to the US.

In addition, the codes initiated on April 12 at the formal conclusion of the "Tokyo Round" trade negotiations in Geneva, they observe, provide new international rules and procedures, dealing with such matters as government procurement practices and technical standards. These codes are expected to inhibit the introduction of new protectionist moves and enhance the effectiveness of the tariff cuts, they stress.

Some of the US tariff cuts of particular interest to India include:

—Ornamented women's cotton blouses, from 35.0 per cent to 16.5 per cent;

—Miscellaneous ornamented cotton furnishings, from 30.0 per cent to 12.8 per cent;

—Steel bars, from 8.0 per cent to 3.2 per cent;

—Lace made of vegetable fibres, from 34.0 per cent to 13.6 per cent:

—Cotton handloom fabrics, from 13.0 per cent to 6.0 per cent.

—Ornamented women's cotton dresses, from 35.0 per cent to 14.0 per cent.

During 1976, the United States imported from India:

—10,745,000 dollars worth of the indicated blouses, accounting for 63.4 per cent of US imports;

—3,075,000 dollars worth of the indi-

Mobile homes on the rebound

Mobile homes are on the verge of a comeback according to Predicasts, Inc., the Cleveland-based business information and market research firm. In an industry study recently made public, MOBILE HOMES AND FACTORY-BUILT HOUSING, their research group concludes that mobile homes will regain their dominance of the low-cost US housing markets in the 1980's. With the price-tag on a conventional home skyrocketing, the less expensive mobile home will benefit, with an additional boost expected from less stringent zoning regulations and more favourable financing terms. Add replacement demand and population shifts, which will bring even more buyers into the market, and the outlook for mobile homes is quite positive, with sales expected to reach 500,000 units by 1990.

Prefabricated homes, as the following table shows, won't share in the limelight according to Predicasts' researchers. Sales will be hurt by both their extremely narrow cost advantage vis-a-vis conventional homes and a lackluster public image. These factors, compounded by continuing difficulties with building and zoning regulations, will hold sales at a stasis of approximately 75,000 units per year through 1990. Modular homes—which differ from prefabs in that several massive sections, rather than many component packages, are completely assembled at the factory—will fare better, with sales reaching 100,000 units by 1990. The study targets new design approaches, more sophisticated engineering, and improved quality as contributing factors.

Mobile Homes : 1960-1990

('000 units)

Item	*1960*	*1965*	*1970*	*1975*	*1978*	*1985*	*1990*
*One-Family Starts**	1112.5	1181.4	1216.3	1108.2	1710.0	1825	1820
% Mobile Homes	9.3	18.3	33.0	19.2	16.2	26.0	27.5
Mobile Home Shipments	103.7	216.5	401.2	212.7	275.0	475	500
% Prefabricated	6.3	5.9	4.9	4.2	4.2	4.1	4.1
Prefabricated Shipments	69.9	70.1	60.0	46.1	72.1	75	75
% Modular	....	....	2.9	3.6	4.4	5.2	5.5
Modular Home Shipments	....	.7	35.0	40.0	75.0	95	100

*Includes mobile homes **Source:** *Predicasts, Inc.; Cleveland, Ohio.*

cated cotton furnishings, accounting for 66.9 per cent of US imports;

3,523,000 dollars worth of steel bars, accounting for 82.7 per cent of US imports;

—1,837,000 dollars worth of the indicated lace, accounting for 82.7 per cent of US imports;

—1,643,000 dollars worth of the indicated fabrics, accounting for 98.5 per cent of US imports;

—1,199,000 of the indicated dresses accounting for 33.8 per cent of the US imports.

The products listed above, it is stated, were chosen on the basis of past trade patterns and the size of the US tariff cuts, and thus single out cases where the Tokyo Round tariff cuts are likely to offer considerable opportunity for expansion of exports to the US. They exclude heavily traded items for which there were relatively small tariff cuts, and products imported into the US in small quantities for which there were large tariff cuts. Also, the products indicated do not include those already entitled to duty-free treatment in the US under the Generalized System of Preferences (GSP).

tremendous opportunities

Some US tatiff reductions not listed above, it is pointed out, could also offer substantial opportunities for export development. In some particular cases—which would be difficult to predict in advance—a substantial reduction in the tariff on an item not now traded in large quantities could be just the trigger needed to make that product a major export item, or a small tariff reduction on a heavily traded item could be sufficient to produce an important addition to the country's foreign exchange earnings.

For example, it is suggested, that many developing countries "are bound to benefit" during the 1980s from the US agreements to reduce and bind its tariffs on a number of semi-processed and simple manufactured products. The US concessions on imports of raw and processed fruits and vegetables, it is emphasised, will almost certainly lead to increased US imports of those products from many countries.

"But even more important", it is pointed out, "is that international trade will, over all, inevitably be stimulated by the Tokyo Round reduction to world trade." This overall expansion in trade is bound to raise the demand for west and south Asian exports.

Plantations in Sri Lanka

THE SRI LANKA parliament has recently passed the National Institute of Plantation Management Bill in order to improve the existing productivity level of plantation crops. The tea and rubber plantations, which earn a large proportion of the country's foreign exchange, are in a bad shape.

The UN Food and Agriculture Organisation has agreed to assist to the extent of $165,000 in the establishment of an institute to impart management training to those engaged in the industry. The personnel engaged in both the public and private sector plantations would be given regular refresher courses in management techniques and other aspects of plantation work.

In the tea industry, the rot began with the nationalisation of the mostly British owned plantations. Most of the tea estates have been running at a loss, because unlike the British companies, which secured the services of management experts, the industry has been run without competent managers. Moreover, there has been considerable political interference in the costing of the tea estates and the level of discipline among the workers has been low.

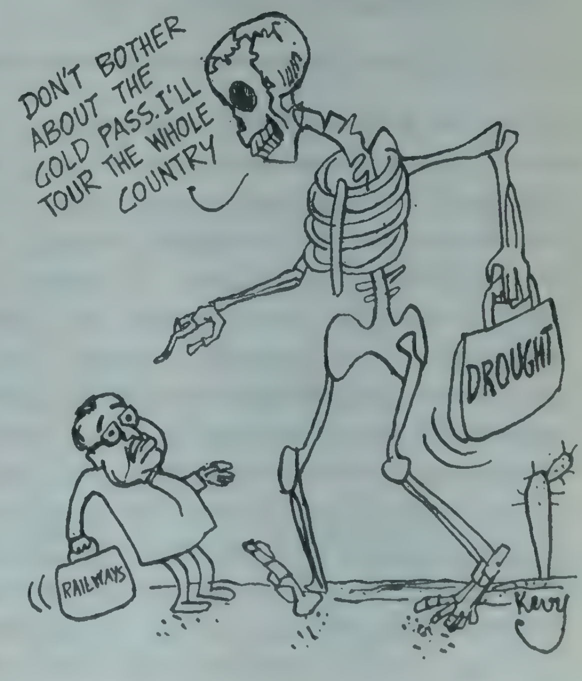
An important flaw in the growth of the tea industry has been the slow rate of replantation. For instance, for the 600,000 acres under tea owned by the state and the private sector, the government has set a target of replanting at the rate of 7,500 acres annually and pay a subsidy of Rs 6,000 per acre as an incentive. But this is too slow a rate and too little money is being offered, according to the Sri Lanka tea industry. It has been estimated that it costs Rs 25,000 to replant an acre of tea plantation in the mid and low regions of the country and Rs 13,000 elsewhere. A committee appointed to look into the issue of subsiding tea replanting has recommended Rs 15,000 an acre for the mid and low country areas. Similarly, although replanting was begun 25 years ago, only 73,000 acres had been effectively replanted. At this rate, it would take another 250 years to replant the 600,000 acres under tea in Sri Lanka. In other words, the speed of replanting has to be accelerated.

During the debate on the National Institute of Plantation Management Bill, some members of parliament complained that the taxes on tea were too high. They said that since the nationalisation of plantations by the government, bureaucrats, who knew nothing of replanting, had imposed taxes without understanding their significance. Some MPs pointed out that in Kenya, a producer was paid about Rs 3 per lb, instead of being taxed.

long-term strategy

The replanting rate of rubber plantation in Sri Lanka has also lagged behind since 1963, leaving a backlog of around 200,000 acres, which need immediate replanting. There is hardly any land available for new planting. So future increases in rubber production will have to be through increased yields from the existing plantations. In this context, the Commonwealth Development Corporation, with assistance from the British ministry of Overseas Development, proposes to draw up a long-term development strategy.

Of the 560,000 acres of rubber planta-


DON'T BOTHER ABOUT THE GOLD PASS. I'LL TOUR THE WHOLE COUNTRY
DROUGHT
RAILWAYS
Kevy

tions in Sri Lanka, only a quarter belong to the state and small holders own the rest. The small-holders rubber replanting project aims at improving the slow pace of replanting. The districts to be taken up by the project are the two main rubber growing regions of Sri Lanka—Kalatar and Ratnapura. The programme will subsequently be extended to the other rubber growing areas in the country.

The small-holders are to be assisted financially and technically. Replanting payments are to be made for 24,000 acres of private rubber lands below 50 acres in the two districts. The project is to provide for the establishment of the infrastructure as well as the strengthening of extension services and training facilities. Processing facilities will be provided for the small-holders through the extension of the group processing centre scheme.

The project is expected to raise rubber replanting by small-holders from the present annual rate of 1,400 acres to 9,000 acres. Payments for replanting would extend over 10 years and more will be spent on supporting services. The present output of 3,800 tonnes in the two districts is planned to the increased to 13,000 tons by the eighth year. The increased output from the project area and the quality improvement of sheet rubber would increase the value of Sri Lanka's rubber exports. In 1978, Sri Lanka exported 350 million lbs of natural rubber, most of it to China under the rubber-rice pact.

Malaysian palm oil

FROM ALMOST negligible production in 1960, Malaysia has overtaken Nigeria as the world's largest producer of palm oil, with an output of 1.8 million tonnes, 45 per cent of world's output. This rise in output has been accompanied by some problems. For instance, recently large plantation groups have complained that syndicates have been using their brand names to pass on inferior palm oil seedlings to small-holders, with the result that a certain quantity of inferior palm oil is being produced. The plantation groups, which have spent large sums to develop the high quality seedlings, say they are getting a bad name. Telling the racketeers to stop the practice, which is fairly widespread, Mr Paul Leong, Malaysia's minister of Primary Industries, stated recently that the use of inferior seedlings could have serious implications for the palm oil industry.

There is a conflict of interest between the growers and refiners which could be traced back to five years, when numerous refineries were established all over Malaysia. Unlike the rubber factories, which were set up mainly by the plantations themselves, the palm oil refiners were largely independent operators, who built their plants to take advantage of the government's export duty on crude palm oil and the plentiful supply of crude at that time.

intense competition

As more refineries were built, competition for crude oil became intense. So much so that in times of production shortfalls, there was a scramble for supplies. During such times refiners accused growers of exploitation.

Last October, the ministry of Primary Industries brought the Malaysian Oil Palm Growers Council (MOPGC) and the Palm Oil Refiners Association (PORAM) together and hammered out an agreement based on the CIF, countback formula. Under the pact, growers agreed to sell, and refiners to buy crude oil at the prevailing Rotterdam price minus the freight and insurance charges.

The refiners have complained that the pact has collapsed recently as their members have had to pay the full Rotterdam price for their purchases. This can add up to as much as £40 premium per tonne. The palm oil growers, however, have denied and add that there are growers and refiners who are not members of their respective organisations and who are free to sell and buy at prices dictated by the market.

Recently, the government froze all applications for new palm oil refineries, after realising that too many approvals had been given. Some Malaysian planners are worried that if all the palm oil produced by the country was refined, it might create the problem of finding markets. Many countries put high tariffs on refined palm oil, while crude oil is given easy access.

There are fears that unless Malaysia makes its crude palm oil freely available to its traditional consumers overseas, these clients will switch to other edible oils. Malaysia needs these traditional buyers as its production is growing rapidly and is expected to exceed four million tonnes by 1985. The biggest of its land agencies, FELDA, has more than 700,000 acres under palm oil, half of which has yet to reach maturity.

A Palm Oil Research Institute was set up last year to improve the quality of oil, establish Malaysian standards and find more end-uses. This was followed by the setting up of the Palm Oil Registration and Licensing Authority (PORLA) to keep track of what is going on in the industry. There are also tough environmental laws, requiring palm oil mills to cut down their effluent discharge to a minimum within three years.

The government is currently studying recommendations submitted by the International Commodity Clearing House (ICCH) on the setting up of a Palm Oil Exchange. A company may be set up to provide the clearing and guarantee services and a management contract whereby ICCH would provide the necessary management and secretarial functions. The exchange would be a self-regulatory, private sector body with status similar to the Kuala Lumpur Stock Exchange.

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MOVING FINGER

The strain of being a lame-duck prime minister, by the courtesy of the president, is evidently beginning to tell on Mr Charan Singh. When he was subjected to heavy heckling during his visit to Hyderabad last week, he was reported to have explained that he did not seek the office and that he had somehow got in it and that "frankly I am not happy". We may readily believe that he is not happy—no one can be happy in the situation he finds himself in—but, for him to claim that he did not want to be prime minister is to strain the credulity of the public. After all when he was called to form the government, he was unguarded enough to exclaim that his life's ambition had been fulfilled. Simultaneously, his wife was found asserting that, had not her husband fallen ill in March 1977, he would not have had to wait 30 long months for his deserts. By now pretending that he is a reluctant prime minister, Mr Charan Singh is clearly adding insult to the injury inflicted on the Constitution by the illegitimacy of the caretaker government which the president has chosen to foist on the country.

Not that Mr Charan Singh is the only politician to be befuddled by the current state of affairs which can be adequately described only with the help of the Shakespearean phrase about the times being out of joint. Take, for instance, Mr Morarji Desai. While "atoning" for the false list of supporters submitted to the president, Mr Desai announced that he was retiring from politics. Then came second thoughts and the public was informed that what he meant was that he was retiring from *active* politics and not from politics as such. The thinking process continued and his next declaration of intent was that, having discovered the distinction between *active* politics and *power* politics, he was planning to eschew only the latter. Similar serialisation of purposes has been taking place with regard to his contesting in the mid-term poll. At any given point in time, the answer to the question whether he has decided to be a candidate or not would depend on which newspaper of the day one chooses to trust. For instance, according to *The Times of India* of August 31, Mr Desai had not taken a final decision on offering himself as a candidate for Lok Sabha while the *Indian Express* and other papers of the same date informed us that Mr Desai had announced at Rajkot his decision not to contest.

The trouble is Mr Desai is consulting his conscience instead of common sense. Conscience, it is well-known, makes cowards of us all, whereas commonsense could help one to have the courage to face facts. Surely, Mr Desai must realise that, at his age, he has not much more to contribute to the government of the country by holding office in it. He must also be conscious of the fact that there will be little support anywhere for another bid on his part for the prime ministership. Since it is obvious that he himself will not be content with playing a second fiddle to anyone else, including Mr Jagjivan Ram, who is now the leader of the Janata party and is a proclaimed candidate for the prime ministership in the event of his party being able to form a government after the mid-term poll, it is difficult to see why at all Mr Desai should be thinking of reentering Lok Sabha. Already he has done much harm to the Janata party by contributing substantially to its discomfiture and defeat during the recent political crisis. He should now make amends by clearing the atmosphere and this would mean his giving up wavering and announcing firmly and finally that he will not contest the election and will confine himself to campaigning for the Janata party candidates wherever his efforts will be effective, if he so wishes. His services may of course be made available to the country at large as from an elder statesman with no personal stake in the power game.

Where Mr V.C. Shukla was vicious and wicked, Mr L.K. Advani almost always self-righteous and often naive, Mr Purushottam Kaushik seems to be simply lost. There were reports that he let himself to be pressurised into taking office in the Charan-Chavan ministry by that precious pair of political bullies, Mr Madhu Limaye and Mr George Fernandes and that, in any case he did not at all fancy the Information and Broadcasting portfolio. I wish that he had let his instincts guide him for, as minister for Information and Broadcasting, he is bringing no credit on himself. It is being widely suspected that he is unable to resist the pressures of certain political bosses who are insisting on his twisting the arms not only of the government mass media but also the press. For instance, he is being charged with insisting on officials of the Press Information Bureau talking to "inconvenient" journalists and bringing them round.

Meanwhile, Akashvani and Doordarshan are daily degrading themselves. They do not seem to realise that the Janata(S) is not the ruling party. There is in fact no ruling party in the country now. Hence there is no need to give VVIP treatment to Mr Raj Narain as if he were the president of the ruling party. He is just one of the many politicians who are sticking around for what is in it for them. This being the case, it is surprising that his allegations relating to Mrs Indira Gandhi on her involvement in the Jaguar affair should have been given so much time on the air. Surely no public purpose is served by stimulating Mr Raj Narain's oral diarrhoea.

VB

Cover feature

Feeding the growing billions

World population, which at present is well past four billions, is expected to approximate six billions by the end of the current century. Notwithstanding the recent advances in global agricultural productivity that have had no historical parallel, the feeding of this rapidly growing population, indeed, is a frightening as well as a challenging task.

In this piece, which formed the basis of his this year's (ninth in the series) Coromandal Lecture, "Agriculture for the 21st century", delivered in New Delhi on September 4, Prof. Sylvan H. Wittwer, Director, Agricultural Experiment Station, Michigan State University, United States, surveys the gains registered on the agricultural front in the past and dwells at some length on the developing constraints on farm output as well as the directions which future research in agriculture has to take.

Although he points out that crop yields have started plateauing in many countries, yet never, he feels, was the time more opportune to boost farm production. For the first time, the world, he thinks, now possesses the capability to relieve mankind of the scourge of malnutrition and hunger.

Prof Wittwer deplores the current erosion in support for basic research for the enhancement of crop productivity. This trend, he stresses must be corrected. The accent should be on utilising more and more renewable aids to agriculture.

The potential for raising global crop production, Prof Wittwer opines, is enormous. Another encouraging fact is that variability of grain production has been substantially reduced. The cause of world hunger, he feels, is not the shortage of food. It is poverty. The future world food problems will not be of production but will be of either getting food where people are or of purchasing power.

THE RECENT achievements in global agricultural productivity have had no historical parallel. We are in the midst of the greatest food production revolution the world has known. During the decade from 1965 to 1975, developing countries collectively increased their food production by 38 per cent. We are not only now producing more food than ever before in all of history but also more food per capita. The world's population is now well past four billion, and aside from a major disaster (war, pestilence or famine), is destined to approximate six billion by the year 2000. The prospects are frightening as well as challenging.

Over 70 per cent of the current population and over 85 per cent of the projected population growth are located in the less developed countries. Eighty per cent of the world's poverty is in rural areas. Several hundreds of millions of people are already suffering from malnutrition. According to the report of Steering Committee for the World Food and Nutrition Study (1977), it will be necessary to increase food production by at least 3 to 4 per cent per year between now and until the beginning of the 21st century if significant improvement is to occur.

To project events, accomplishments and progress relative to future food supplies is hazardous. All projections heretofore for crop and livestock productivity have fallen far short of true accomplishments. More important still than that which we predict is the unpredictable. Twenty year projections in 1937 missed the following major discoveries : radar, antibiotics, jet propulsion and atomic energy.

Means of achieving adequacy and stability in our food supply have been given much attention. Volumes have been written. Conferences, symposia, workshops, study groups and hearings abound. The oft quoted noble declaration is to meet basic human needs and to eliminate from the face of the earth the age-old threats of famine, hunger and malnutrition.

During the last 20 years, there have been vacillations of progress and catastrophe. In the mid-1960's there was a cloud of doom projected from the two-year drought in India and Pakistan. In the late 1960's there arose a happy euphoria from the progress of the green revolution. The poor harvests of 1972-74 brought new predictions of doomsday. More recently, complacency from world foodgrain surpluses once again abounds, the set aside acreage programme flourished in the USA, and there are record harvests. The current view will not prevail. There will be further crisis between now and the 21st century because of the precarious balance between people and food.

A puzzlement for all projections is the often prevailing concept that man has reached the limits of technology and resource management. Far from achieving scientific or biological limits the world has only begun to explore the capabilities for increasing agricultural productivity. Basic and applied research can be the catalysts for stimulating governmental efforts to increase the stability of production and expand food supplies. The resource base can also change with time and technology. This paper focuses on the technology and resource management options at hand to deal effectively with the resolution of agricultural productivity to meet basic human needs for the 21st century.

Events of the 1970's : Many events important to agriculture transpired in the decade of 1970's. The year 1970 saw the peaking out of the rate of world-wide population increase. It was the year domestic oil production reached its maximum in the US. The environmental movement received its greatest visibility in the early 1970's. A southern corn leaf blight devastated American corn fields in 1970 and made us painfully aware of genetic vulnerability. In 1972 we saw a plateauing of fish harvested from the oceans, and there were massive shipments of grain to the Soviet Union. The year 1972 saw the initiation of uncertainties, volatilities, and unpredictabilities in the prices of major food commodities at market places not before experienced in this generation. Alternatively, there were food shortages and surpluses. The early 1970's saw a major drought in the African Sahel. There was an oil embargo in 1973. The price of imported oil has risen by a factor of 10 during the decade of the seventies. Finally, we are in the midst of a massive transition from the use of non-renewable to renewable resources and the age of "intermediate" or "appropriate" technology has been ushered in.

There have been other significant events relating to food and agriculture. The international agricultural research centres increased from four in the 1960's to 12 in the 1970's. The current annual budget for these centres approximates $135 million. A Consulative Group for International Agricultural Research (CGIAR) was created along with its priority body the Technical Advisory Committee, known by its acronym, the TAC. A World Food Conference was convened in Rome in 1974. An International Conference in Crop Productivity—Research Imperatives was held at Boyne Highlands, Michigan, in the USA.

There was a World Food Conference of 1976 in Ames, Iowa, USA; and a World Food and Nutrition Study conducted by the US National Academy of Sciences and published in 1977. In the USA, a Famine Prevention and Freedom from Hunger Act has emerged along with the International Development Cooperation Act of 1978. More recently, an Institute for Science and Technological Cooperation has been created. The research and development efforts will be directed primarily to nations overseas. It legislates a cooperative effort among the Land Grant and other universities in America with the United States Agency for International Development. Major university linked programme are emerging in research and education relative to small ruminants (California), sorghum and millet (Nebraska), fisheries and aquaculture (Arkansas, Hawaii, Michigan, Oregon), peanuts (Georgia), field beans and cowpeas (Michigan), marginal nutrient deficiences (California), and more recently integrated crop protection. Finally, an International Agricultural Development Service (IADS) has been created to provide information for and strengthen national agricultural research centres such as the National Dairy Research Center at Karnal and the Indian Agricultural Research Institute in New Delhi.

Many assessments have been made of the green revolution. Approximately 44 per cent of the wheat and 27 per cent of rice now consists of new high-yielding varieties in developing countries. Much of the growth in production of the new varieties can be ascribed to irrigation. Increases in food production have just about balanced the rise in population. Meanwhile, there has emerged in India a "White Revolution" to be described later, and in arid lands, a "Blue Revolution" ascribed to the precipitous rise in the use of drip or trickle irrigation systems on high value crops.

Global Problems Relating to Agricultural Productivity : Many current global problems relate to agricultural productivity. Some of these are detailed as follows. All have been highlighted in numerous conferences, reports and books. It has been

The 1978 Borlaug award, instituted by Coromandel Fertilisers in honour of Dr Norman E. Borlaug in recognition of his work in the advancement of wheat revolution and increasing food production in various parts of the world, has been presented to Dr M.S. Swaminathan, former Director-General of Indian Council of Agricultural Research and presently agriculture secretary to the union government. Dr Swaminathan is a world renowned agricultural scientist and his contribution to the development of Indian agriculture has been outstanding.

projected that western agriculture, based on intensive use of natural resources, many of them non-renewable, is doomed and will not survive.

Poverty
Inflation
Malnutrition
Unemployment
Deforestation
Desertification
Population increase
Water management
Soil erosion
Changing climate
Shortage of firewood
Uncertainties of energy supplies
Toxic chemicals in the environment
Adequacy and dependability of food supply
Irreversible use of prime agricultural land.

Society is subject to the constant propaganda of presumed impending calamitous events. Currently an area of concern widely publicised is the proposed climatic changes that will soon be initiated by a rising level (0.4 per cent per year) of atmospheric carbon dioxide. There are dire predictions of warming trends with shifts in precipitation patterns that may cause serious dislocations in agricultural production. The prospects of climate change from increasing atmospheric levels of CO_2 between now and the 21st century, however, should not frighten agriculturists. Seasonal and inter-annual variability in climate has always made agriculture uncertain. Conversely, the favourable biological effects of a rising level of atmospheric carbon dioxide on increasing photosynthesis and decreasing water requirements may outweigh any adverse climate induced changes. The history of agriculture is one of resilence and adaptation to climatic change. Climate, including that which is man-induced, should be considered both as a resource to be used wisely and a hazard that must be dealt with.

The Resource Base for Agricultural Production : Climate should be considered as the most important agricultural production resource. It is scarce and needs to be allocated for specific crops in specific locations. Climate, as a resource, should be viewed not so much globally, but locally and regionally. For example, in the grain belt of the USA corn and soybeans are the leading crops. The climate resources can be allocated between soybeans and corn. In west Texas it is a division between sorghum and cotton. For the Mississippi Delta it is cotton, soybeans, or rice. The climate of the Pacific North-west and the West Coast and Western Michigan and New York in the USA can be allocated to the production of alternative fruits and vegetables. There are "sites" (climatic resources) where fruit crops never fail.

India, likewise, has its climatic resources. Apple production in Himachal Pradesh has been so dramatic in recent years that it is referred to literally as an "Apple Revolution." Out of the Punjab has emerged a model of agricultural food production, which has an ideal climatic resource conducive to the production of 2-3 crops of grain a year. Sometimes it takes optimization of the already present climatic resource, which has occurred in the Gujarat state in its "White Revolution" combining the water buffalo, milk cow with hyprid Napier grass—as a livestock forage system adapted to the tropics.

There is a challenge for making climate a more useful and less hazardous resource. On the negative side, it is now exacting an enormous toll, on a global scale, in reduced crop productivity and potential food production. Desertification, for example is world-wide menace affecting every inhabited continent, with the possible exception of Europe. It annually destroys 12 to 17 million acres. Otherwise, arable land is being turned into stony wastes or heaps of drifting sand. Prolonged drought often accelerates the destruction. The US National Academy of Sciences document *Climate and Food*[1] addresses in detail the effects of changing climatic patterns on crop productivity.

The most obvious impact of climate and weather is on agricultural food production. This has been most dramatically illustrated by the year to year fluctuations in grain production in the Soviet Union. The USSR cannot consistently feed itself. The shortfall this year is estimated at 65 million metric tons. The periodic failure of the monsoon in South Asia (India), prolonged drought of the early 1970's in the African Sahel, that of the mid-1970's in western Europe, and the drought in the corn belt of the USA in 1974 are all manifestations of the climate anomaly that many farmers fear most, that of drought. The latter resulted in a 22 per cent reduction in the major food and feed grains in the US in 1974, which was more devastating than the climate induced corn blight of 1970. Climate and weather remain as the most determinant factors in crop productivity. The most serious effects both on the stability and magnitude of food supply are manifest in the semi-arid tropics of which India abounds. Fortunately for India, there has been established an International Centre for Research in the Semi Arid Tropics (ICRISAT) at Hyderabad, the new outstanding facilities of which have just been dedicated.

The USA has a remarkable climate and **land resource base** for crop production. But, so does India. The corn belt in the USA may constitute the largest single continuous area devoted to crop production in the world and with a climate seldom frequented by major drought. It is true that of the regions of the world most productive, in an agricultural sense, the USA has both a "fertility" of climate as well as soil.

But, the land resource base can change with time and technology. Land productivity may be improved as well as depleted by cropping. The original croplands of Western Europe and Japan were vastly inferior to what they are today. This is currently reflected by wheat yields in western Europe and rice yields in Japan that are double those of the US. One of the most common sounds in the Peoples' Republic of China is the blasting of hills to open more land for cultivation. The use of lime, chemical fertilizers, animal manure, green manure, irrigation, and better farming practices has transformed the sandy soils of the eastern seaboard of the US into some of the most productive vegetable growing soils in the world. India yet has vast undeveloped land resources, the productivity of which is currently constrained by lack of water. There are 107 million acres of land in India which could be irrigated, only 57 million acres are now irrigated.

Reduced tillage is an example of an important land resource conservation technology. The plough has created losses of billions of tons of topsoil from wind and water erosion. The use of appropriate chemicals for weed control has now established in the western world the reality of improved crop productivity without ploughing the land. Over three million hectares (corn, soybeans, wheat) in the US were planted in 1978 without tillage, and on over 22 million hectares, tillage was reduced from the conventional level. **Reduced tillage is the most significant technology yet developed for the control of soil erosion, maximisation of cover on the land, and for the conservation of energy, labour, water, soil fertility, and organic matter for the main food-producing areas of the earth. In addition, a higher proportion of sloping land in hilly areas can be brought into production or planted to more profitable crops.**

Plants provide directly, or indirectly, up to 95 per cent of world's food supply. They are also our chief source of renewable resources for industrial materials. Research on biological processes (photosynthesis, biological N_2 fixation, cellular approaches to plant breeding) that control and limit crop productivity is particularly crucial. To this *next generation of agricultural research* could be added improved efficiency in nutrient and water uptake; greater resistance to competing biological system, environmental and climatic stresses and toxic chemicals; opportunities for genetic improvement through conventional means; and, hormonal mechanisms and plant development. Such technologies, if pursued vigorously, would add to, rather than diminish, the earth's resources.

Successful conservation tillage requires two important inputs--first, an appropriate herbicide, or crop mulches or plant residues which inhibit weed growth; and second, specially adapted seed drills for use on sod or non-tilled soil. Use of an herbicide mandates registration and clearance by regulatory bodies. The development and release of appropriate chemicals for killing of sod and subsequent weed control will continue to have impact on the development and speed with which zero tillage or reduced tillage can be used in both American and world agriculture. **There is the potential, however, of bringing into food production tens of millions of hectares of land heretofore not suitable for agricultural purposes and for reducing soil erosion to essentially zero on land now cultivated. Many crops on many soils in many nations should be adapted to this method of culture wherever soils erode badly.** The ultimate goal will be to utilise allelopathic responses of crop mulches or residues as alternatives to chemical herbicides.

The **water resource base** of the earth is enormous. Seventy per cent of the earth's surface is covered with it. Most of it is salty. Only one per cent is fresh water, and 99 per cent of the fresh water is underground. **Water is the key resource for future agricultural development in many parts of the world. World food production goals must face the water limitations and optimise the management of the water resources that now exist. The next major advance in agricultural production will come through more efficient soil and water management.**[2] Agricultural production consumes 80-85 per cent of the total diverted fresh water resources in the United States. It would be of interest to know the percentage in India. The consumption of water by agricultutre in the total US water budget far exceeds that of energy (3 per cent) in the energy budget. The water resource may become the most seriously limiting of all resources for further advances in agricultural productivity.

The number of kilograms of water needed to produce a kilogram of food is an important variable. Practically no research has been done in this area, although numerous symposia have been held on irrigation and the efficiency of water use. Large differences in transpiration losses exist among species, varying from a scale of 100 for pineapple, to 400-500 for cereals and seed legumes, to over 1,000 for some fruits and vegetables. The water requirements of sugarcane per unit land area in Hawaii is five times that of pineapple. A recent report from Israel indicates that crops vary widely in the efficiency of water use. Sorghum will produc 1.72 kilograms of grain per millimeter of water applied, compared with 1.23 for wheat, 0.65 for peanuts, and only 0.24 for cotton. Water limitations can alter the harvest index and, thus, modify the relationship between crop yield and productivity. There are unexploited adaptations to water limitations among annual plants under semi-arid conditions.

Water management schemes adapted to the semi-arid tropics have been given little attention. The International Centre for Research in the Semi-Arid Tropics (ICRISAT) at Hyderabad on focusing on such studies. There is an ever widening gap between the productivity of irrigated and non-irrigated agriculture. This is being accompanied by increasing population pressures on the land and recurrent cycles of drought.

Equally important are new water management technologies for food crop production. Making more efficient use of available water supplies offers the greatest of technological opportunities, least encumbered by regulatory constraints. The efficiency of using conventionally applied irrigation water varies from less than 30 per cent globally, to 20-40 per cent in the United States, to 80-85 per cent in Israel.

Drip or trickle irrigation is sometimes referred to as the "Blue Revolution." It was first developed for large-scale crop production in Israel, and may reduce by 50 per cent the water now used in conventional irrigation systems (flooding, sprinkling, furrow) for food crop production. World-wide, there are now over 200,000 hectares of cropland equipped with drip irrigation ditches. There is no leaching, runoff, or drainage water pollution. Weed control and distribution of fertiliser can be optimised, and crop and soil management and harvest operations can be conducted without interference. Water of higher salinity than would be acceptable with other methods can be utilised. The drip lines can be installed underground as they are in many of the sugarcane plantations in Hawaii. There are now some exciting results with maize. This both reduces surface evaporation and growth of weeds. The prospects for high frequency irrigation, on some crops, hold even greater promise for efficient water use with less capital investment, resource inputs and management.

With expansion of irrigation must come total water management systems, including drainage. **Disposal, as well as more effective use of waste waters must be regulated**. While the land resource base can initially be made more productive, there are increased hazards of salinisation, and new breeding grounds may be created for insects that serve as vectors for human disease. Legal, social, and environmental problems can multiply.

Reduced tillage is the most significant technology yet developed for the control of soil erosion, maximisation of cover on the land, and for the conservation of energy, labour, water, soil fertility, and organic matter for the main food-producing areas of the earth. In addition, a higher proportion of sloping land in hilly areas can be brought into production or planted to more profitable crops.

There are several serious problems relating to irrigated crop production. One is the increasing prices and uncertainties of supplies of energy for operating irrigation pumps. Another is the depletion of ground water reserves. A third is the increased salinity that results in arid areas. Severe problems have arisen in the Middle East and northern Africa. The Nile Valley of six million acres supports 44 million people, but the river is now a closed system.

American, Indian, and world agriculture is **energy dependent**. It is susceptible to reduced energy supplies and higher costs. The most vulnerable input is nitrogen fertilizer, which accounts for up to one-third of the total fossil fuel energy now going into agricultural production. This is followed by irrigation. A figure as high as 20 per cent of the total agricultural energy budget has been given for irrigation. Sixty per cent of the energy used in irrigated agriculture is for irrigation. Pesticides require approximately five per cent of the total. Other energy-vulnerable operations affecting total food systems include crop drying, food processing, dairying, transportion, and storage (especially refrigeration).

Fossil energy conservation practices in food production require attention. Biological nitrogen fixation, as an alternative to chemical fixation, is an example of such a practice. This could become operational at the farm level through more extensive use of legume green manure and winter cover crops, and through intercropping legumes with non-legumes. The no-till or reduced tillage and drip irrigation systems of soil and water management, discussed earlier, can be adapted to many locations and will not only conserve energy, but soil, water, and organic matter, as well, in addition to reducing compaction and increasing the efficiency of fertilisers and herbicides. New pest management systems and technologies for pesticide applications can reduce energy inputs. A major research effort should be directed toward the more efficient use of solar energy for crop irrigation. The approach should be most opportunistic, since the greatest water needs are usually positively correlated with solar energy intensities.

There are alternative energy input systems in food production. Many options exist. Similarly, there are many alternatives for the production of biogas and the conversion of biomass to energy. All biomass, however, is not readily available or collectible. Land should not be diverted from food production, or the biomass product from that which is necessary to prevent soil erosion and maintain soil organic matter. For the future, economics will largely determine the option selected.

Annual field losses from pests (insects, diseases, weeds, nematodes, rodents) for the major food crops are truly enormous and approximate 35 per cent. All major crops suffer losses before harvest that exceed 20 per cent. These greatest losses are in developing countries. Losses from insects predominate for most, but not all crops. That which is feared most by farmers, along with drought, is the invasion of pests. **Chemical pesticides** have played the dominant role in the control of pests, and will continue to do so in the foreseeable future. Approximately 1.6 billion pound of synthetic organic pesticides were produced world-wide in 1976. Annual global expenditures range between $5 and $6 billion. **Chemical pesticides have accounted for 20 per cent of the increases in farm output during the last 25-30 years, during which time production has doubled.** Since World War-II, there has been an ever-increasing dependence on chemical pesticides. Historians will likely refer to the latter half of the 20th century as the "organic pesticide era". Meanwhile, regulatory constraints and costs relating thereto in the use of pesticides have multiplied exponentially and the yields of the major food crops throughout the world have plateaued. Future strategies for pest control, as now being developed, will likely result for the 21st century in the use of more pesticides in agriculturally developing nations, and less in the more developed. For small farm peasant agriculture, it is not a future option; it is an immediate urgency. Most developing countries are in the tropics. Here, pest control problems are enormously more complex than in temperate zones. Whereas the possibility may exist for some agriculturally developing nations to bypass the fossil fuel age, it is not likely for the chemical pesticide era. In general, the more developed the country, the greater the use of pesticides. Yet, the developing world now uses only 7-10 per cent of the total pesticides. The option of greatest promise to the low income subsistence farmer who cannot buy chemicals or apply them for pest control is the development of crop varieties with built-in resistance.

> **The current and projected natural gas dependency of chemically fixed nitrogen fertilizer remains as one of the most flagrant violations of good economics, use of a non-renewable resource, and threatens a possible environmental problem. It is inconceivable for us to continue to go this route. The alternative is research directed toward enhancing biological nitrogen fixation.**

One of the big developments in the next 20 years will be real time management of agricultural systems, including pests. These will include integrated pest management schemes. They must involve not only entomologists, but plant pathologists, weed scientists, agronomists, horticulturists, plant breeders, climatologists, system scientists, toxicologists, computer programmes, and economists working together with a sympathetic administrative environment. They must also include biological and environmental monitoring capabilities. There must be training programmes to develop new cadres of extension workers or field scouts to monitor insect, disease, and weed populations and to deliver results. In the era ahead, of few stable resources, we must develop integrated pest control measures. This means more than a single line of defence. **It means resistant varieties, improved management, biological controls, and carefully timed and programmed applications of chemicals—all in concert.** Chemical pesticides are currently a part of all **producer supported** integrated pest management programmes.

In the USA, the developement of labour saving technology as a resource has been a major goal. One farm worker today produces enough food for himself and 56 other people, as compared to only 29 people 10 years ago. This is a remarkable achievement. There is no parallel in all of history. The increased productivity per unit of labour input may be attributed, in part, to better management, more timely operations, and more efficient and productive equipment. Mechanisation in the USA has enabled farmers to both carry out their field work on a timely basis and, at the same time, allow for management activities. It has also been forced because of the unavailability, uncertainties, and the rising costs of human labour.

The goals of **mechanisation** in agriculturally developing nations should be viewed differently. For most, the emphasis on increased production per worker and convenience in industrialised nations is not applicable. Systems are needed to optimize labour utilisation and crop production per unit area per unit time. The need is often for more manhours per cultivated hectare per year, more days worked and more uniformly distributed labour throughout the year, and more food produced per hectare. There is a pressing need for mechanisation systems that produce more food and at the same time put more people to work productively. **There is an immediate need and for the**

21st century for more selective mechanisation to enhance yields, minimise losses, increase the total food available, and minimise the risk of crop failures. There are now improved bullock powered tillage instruments in south India. A combination seed and fertilizer drill for seeding wheat in Punjab has increased yieds up to 70 per cent, where harvest mechanisation before the monsoon come in May is critical for wheat, but where hand harvesting and threshing of rice is common during the dry months of September and October. There is an interdependence of selective agricultural mechanisation and local manufacturing capability. No country, except those in the Arabian Gulf area, can endure for long the imbalance of payments that results from the importation of agricultural engineering technology.

Research Imperatives for the Future-Crop Productivity: Plants provide directly, or indirectly, up to 95 per cent of the world's food supply. They are also our chief source of renewable resources for industrial materials. Research on biological processes (photosynthesis, biological N_2 fixation, cellular approaches to plant breeding) that control and limit crop productivity is particularly crucial. To this **next generation of agricultural research** could be added improved efficiency in nutrient and water uptake; greater resistance to competing biological system, environmental and climatic stresses and toxic chemicals; opportunities for genetic improvement through conventional means; and, hormonal mechanisms and plant development. Such technologies, if pursued vigorously, would add to, rather than diminish the earth's resources. They are non-polluting and without noise. They are the areas identified in recent US National Academy of Sciences/National Research Council reports and elsewhere as grossly underfunded; where industrialised developed nations, including the USA with their vast human, financial and natural resources could make their greatest contributions to the agricultural development of Third World nations. If the research efforts were directed toward economically important crops as test materials, the productivity and stability of output of croplands, grasslands, and forests would be greatly improved. These research initiatives would deal with three of the four biological systems which, according to Lester Brown, form the foundation of the global economic system; and they would indirectly improve the fourth, that of fisheries. Such technologies would be scale neutral and economically, socially, politically and ecologically sound. They could ease the inevitable transition we must make from non-renewable to renewable resources. A discussion of each follows. The national focus, in each instance, should be on mission-oriented basic research relating to the enhancement and stability of food production.

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Increased Photosynthetic Efficiency and Yield Enhancement: Photosynthesis is the most important biochemical process on earth. Its improved efficiency holds the key to the future adequacy of our food supplies. Green plants are the primary harvestors of free solar energy. They are biological sun traps. They are net producers of food and energy on a renewal basis. All farm practices directed toward increased crop productivity must ultimately relate to an increased appropriation of solar energy in the plant system. Solar energy is clean, it is renewable, and it is non-polluting. Agriculture is, basically, a solar energy processing machine. It is the only industry that utilises today's incident solar radiation, and is man's largest current user of solar energy. Yet few research efforts on photosynthesis have focused on crop productivity and biomass production.

Dr M. S. Swaminathan, India's senior agricultural research statesman, who moved on recently from the director-generalship of the Indian Council of Agricultural Research to the secretaryship of the ministry of Agriculture, has indicated that it is important that we both protect and enhance the renewability of our renewable resources. The whole intent in agriculture is to collect and store solar energy as a renewable source of food, feed and fibre in plant and animal products, and to do it with utmost efficiency. That efficiency, however, averages less than two per cent annually for the major food crops. For most crops, the efficiency of solar energy utilisation does not exceed one per cent. Under the best of conditions, it is less than three per cent. Many environmental pressures affect photosynthesis, and there is great diversity among plants.

These are many alternatives in research for enhancement of photosynthesis. They include identification and control of the mechanisms that regulate and could reduce the wasteful processes of both dark and light induced (photo) respiration. These mechanisms, according to H. K. Jain, Director of the Indian Agricultural Research Institute, are responsible for redistribution of photosynthates which, in turn, regulate yield and maximise the "Harvest Index". They include resolution of the hormonal mechanisms and identification of growth regulators and heritable components that control flowering and leaf senescence; improvements in plant architecture and anatomy, cropping systems, planting designs, and cultural practices for better light reception; and carbondioxide enrichment of crop atmospheres. Plant breeding research has not generally been aimed as yet for improving the photosynthetic process. It will be in the future. Furthermore, the relationship between photosynthesis and crop yield is complex. Photosynthetically positive mutants should be sought after. Any physiologic-genetic prolongation of the functionally active state of chloroplasts and/or delay in leaf senescence would be important for enhancement of photosynthetic productivity.

Enhancement of crop productivity for increasing biological solar energy conversion in the future is a topic of much discussion. A plethora of reports have appeared Next to hydropower, biomass is now the largest source of commercial solar energy in the US and many other nations. **On a global scale, net photosynthesis ''produces'' about 10 times the world's annual use of energy. The problem is one of collection.** The biomass resource could increase dramatically with efficient photosynthetic conversion of solar energy. The sources of biomass now available for conversion to energy, however, represent only about two per cent of the current fossil energy consumption. Expectations of large increases in energy from biomass farming in most parts of the world, however, are not realistic. The constraints on the use of land and water resources and the needs for food production are too great. Nevertheless, the development of photobiological energy conversion systems has long-term implications for the production of energy, food, and industrial materials in the tropics and countries with large amounts of sunshine. Many efforts are under way to identify food crops and management practices for energy production. Some receiving special attention are sugarcane, maize, sorghum, and cassava. All these are important crops for India.

Finally, much of the basic research for photosynthesis now in progress should be directed toward economically important food crops grown under field conditions as well as in the laboratory. It is known, for example, as one moves in research from the microscopic laboratory level to microscopic field experiments the advantages of the highly productive C_4 photosynthetic mechanism over the C_3 are progressively diminished.

Chemically fixed nitrogen is a non-renewable resource. It is also the largest single and most costly and fossil energy dependent industrial input into agricultural productivity. Up to 35 per cent of the total productive capacity of all crops is now accredited to this single input. Almost one-third of all fossil energy now used in agricultural production goes to chemical nitrogen fertilizer synthesis.

The global use of chemically fixed nitrogen fertilizer for crop production has grown precipitously. In 1905, 400,000 metric tons were produced. This increased to 3,500,000 tons in 1950 and to an output of 40,000,000 tons in 1974. The estimate for 1979 exceeds 50,000,000 tons. Meanwhile, the contributions of biologically fixed nitrogen, estimated at 150-175,000,000 tons annually, has not changed.

Agricultural research, till now, has been primarily concerned with increasing crop yields by the use of fertilizers, pesticides, irrigation, better management, coupled with variety development and genetic improvements. Little attention has been given to control of the biological processes that limit crop productivity. The stage is now set for further yield increases by the use of chemicals for physiological manipulation of the plant. It is likely that a useful role for growth regulators can be found for all crops, and for all biological processes, and for every developmental stage.

Natural gas is the primary fuel (95 per cent) used to produce anhydrous ammonia. It requires 30 cubic fect of natural gas to produce one pound of nitrogen. In other words, a nitrogen fertilizer factory consumes approximately one cubic metre of natural gas for each kilogram of nitrogen it produce as ammonia. The current and projected natural gas dependency of chemically fixed nitrogen fertilizer remains as one of the most flagrant violations of good economics, use of a non-renewable resource, and threatens a possible environmental problem. It is inconceivable for us to continue to go this route.

The alternative is research directed toward enhancing biological nitrogen fixation. The many possible research frontiers and the inadequacy of current funding levels have been thoroughly documented by numerous National Research Council/National Academy of Sciences reports, assessments by federal agencies, the US Congress, national and international conferences and symposia, and in the September, 1978 issue of **Bioscience**. The first opportunity lies in the establishment of rhizobial technology centres. Second, a return to reserch in farming systems specifically relating to cropping systems, making more extensive use of legume green manure and winter cover crops, forage legumes, and possible intercroping of legumes, with non-legumes, is suggested. A third initiative lies in genetic engineering for improvement of both host and microorganism. Symbiotic relationships now exist for legumes, the actinomycete-nodulated angiosperms, the **Anabaena Azolla** combinations that enrich rice paddies, and the **Spirillum** rhizosphere associations in the grasses. These relationships need to be optimised. Finally, there should be an effort toward improving the biological nitrogen fixation associations with grasses, cereal grains, and other non-legumes. Biologically fixed nitrogen is slow-release nitrogen. Losses from nitrification and denitrification, which now approximate 50 to 65 per cent of the fertilizer nitrogen, could be reduced by 50 per cent.

Further research breakthroughs in biological nitrogen fixation, which will be important for enhancement of agricultural productivity, will be hastened if active linkage are now created between scientists engaged in basic fundamental research in the laboratory with those in mission-oriented applied, and problem-solving areas under field conditions. Collaborative efforts between scientists in developed and less developed nations should be encouraged. **Current efforts in progress between the C. F. Kettering Foundation in Yellow Springs, Ohio, and the Indian Agricultural Research Institute in New Delhi should be encouraged.** There is a unique opportunity with research on biological nitrogen fixation to apply science to problems in agriculture to our fund of basic knowledge and at the same time contribute mightly to the enhancement of food and fibre production. The economic, resource, and environmental stakes are too high to do otherwise.

The magnitude of biological nitrogen fixation with many crops is already at a high level. The blue-green algae-azolla complex (the green scum on the surface of water in rice paddies) can provide 75 per cent of the nitrogen requirement for California rice. Over 50 per cent of the nitrogen requirement for wheat in the famous Broadbalk plots at Rothamsted in the UK have since 1943 come from nitrogen fixation by blue-green algae on the soil surface. It has recently been reported at the IRRI in the Philippines that the azolla plant and its anabaena helper can double their mass in three to five days, and accumulate 30-40 kilograms of nitrogen per hectare in two weeks. Five crops of azolla (October-January) in the Philippines produced 117 kg/ha of nitrogen in 106 days. In another test at IRRI azolla-anabaena fixed over 500 kg/ha of nitrogen in 330 days. **Azolla is extensively used as a green manure crop in China and Vietnam, but has received little attention in South Asia—although it is found in abundance.** It deserves urgent research. Dr N. S. Subba Rao, a microbiologist at the Indian Agricultural Research Institute, is one of the world's authorities in this area.

Forage legumes (alfalfa, clover) will fix up to 600 kilograms per hectare per year, and the actinomycete-nodulated angiosperms such as red alder will fix up to 300 kilograms/hectare/year. Coordinated and appropriately funded laboratory and field research could greatly improve these levels of fixation. No place have I seen more remarkable and positive results than I saw in 1975 with **Rhizobium** innoculation of legumes (soyabeans) in Punjab and at the Indian Agricultural Research Institute.

Abiotic (non-living) nitrogen fixation, utilising renewable energy resources, must also remain an option. One possibility is the production of ammonia in solar cells utilising nitrogen gas, water, and catalysts. Zero energy inputs into nitrogen fixation, with appropriate catalysts, is another. A nitrogen fixing generator for farm use, which will utilise the renewable energy resources of wind, waterfalls, or sunlight, is being designed.[3]

The **genetic resources** of the earth for crop improvement are enormous. A resume of accessions, assembled from the latest annual reports of the several International Agricultural Research Centres, shows 40,000 for rice, 26,000 for wheat, 12,000 for maize, over 14,000 for grain sorghum, and 5,000 for pearl millet. There were over 12,000 accessions for potatoes in 1976, and over 2,000 for cassava. Chick peas show a figure of near 11,000, plus 47 wild species. There are 5,530 accessions for pigeon peas, and 3,000 each for peanuts and field beans. The ultimate goal however, is not fulfilled in the collection and preservation of genetic resources, but in their utilisation. These plant genetic resources now being assembled will truly shape the fuiure for world crop productivity.

The standard techniques of selection, based on phenotypic expression, controlled hybridisation, and more recently, selection for better nutritional qualities, have given us super strains of rice, wheat, maize, sorghum, millet, some legumes, and many new fruits and vegetables. The process is relatively simple for cereal grains, the seed legumes, forages, and many vegetables. Those that are vegetatively propagated (potatoes, sweet potatoes, cassava, fruit trees), however, pose a special problem. There is now an effort to freeze meristems in liquid nitrogen, for the preservation of genetic stocks of vegetatively propagated food crops. The challenge will then be to initiate regrowth, utilising appropriate metabolites, growth regulants and culture media.

An equally exciting area for the future is to genetically alter crops for greater climatic adaptability, and to get higher yields from soils which are infertile, too acid, toxic, or saline (salty) for varieties now in use. No wheat varieties are yet suitable for the lowland tropics and there are at least 100 million acres not suited for present rice paddies. Vast land areas of the earth, including those in India, are either not utilised, or are under-utilised for economically important crop production. It may be that crop production is limited more by nutritional incompatibility of the plant with its environment than the inefficiency of the photosynthetic process.

There is a report from California[4] that marketable yields have been obtained with a salt-tolerant research line of barley irrigated with water from the Pacific Ocean. Barley grown with seawater was found satisfactory as a feed, and yields were appreciable. The genetic approach to saline crop production has been proven with barley, and considerable progress has been made with the tomato. This development could be a springboard for research in the 21st century in genetically opening a vast new water resource for crop production, heretofore not accessible. Genetically controlled plant nutrition will surely play an increasingly important role in the future of crop production.

Some of the most biologically productive sites on earth are the estuaries. These are semi-enclosed coastal bodies of water which have a free connection with the open sea, and in which the seawater is diluted by fresh water. **Estuaries cover millions of acres, and thousands of miles of seacoast. Little attention has been given in utilising this unique land and water resource for food producing crops.**

Within the very shadow of unprecedented progress for enhancement of food crop productivity has come a plateauing of yields of the major food crops of the earth. Yields of wheat, maize, sorghum, soybeans and potatoes in the United States have not increased since 1970. This is true of maize, potatoes, wheat and cassava in Latin America. The yields of rice in India, Bangladesh, Indonesia, Nepal, Pakistan, Philippines, Sri Lanka and Thailand were the same in 1976 as in 1970, even with a substantial input of high yielding varieties. Overall world grain yields have declined. This phenomenon of yield plateauing needs careful analysis.

Genetic resources will continue to be utilised for improvement of the nutritional (biological) value of food crops. Cereals will still dominate the diets of most people in the 21st century. Progress in genetically raising the levels of protein and critically deficient amino acids with cereal grains has been singular. Rice, wheat, and barley selections have been identified with higher protein levels. Both the biological value and the level of the protein of maize have been enhanced using the opaque-2-recessive gene, and, more recently, in maize of normal background. Similar genetically superior strains of sorghum have been identified. There is no cheaper, better, or quicker way to solve the protein needs of people in most agriculturally developing nations than to improve the cereals that they eat. Combining the high productivity of certain cereal crops (maize, sorghum, millet) with the superior protein quality and "noble" grain characteristics of others (wheat, rice) remains, however, as a major challenge for plant scientists now and far the 21st century.

Genetic engineering has emerged as a series of events to cover new techniques of cell culture, protoplast fusion, and plasmid modification and transfer. (Plasmids are DNA fragments capable of carrying genetic materials). An entire volume has recently been devoted to "Genetic Engineering for Nitrogen Fixation."[5] Significant advances have occurred in defining techniques for isolating protoplasts (plant cells without walls), their fusion, and providing cultures, with appropriate growth regulants, for rapid regeneration into new plants. With protoplast culture has come haploid production. Haploids (plants with half the chromosome number) do not set seed and may result in tremendous biomass production. New freeze-storage techniques and the establishment of gene banks of plant cells, as well as for meristems, will be a means of preserving rare and useful genetic materials. These new cellular approaches to plant breeding, sometimes described as somestic cell genetics, could become a major avenue for broad crosses, new species building with greater yield, resistance to biological and environmental stresses and to toxins, and for improved nutritional quality. Protoplast fusion offers hope of tapping genetic material not now available, because of otherwise sterility barriers between genera and species. Transformations and regeneration of parasexual hybrids from fixed protoplasts could revolutionise agricultural crop productivity. The ability to produce material, however, that can be readily introgressed into established plant breeding programmes remains a major challenge. Also, no such hybrids have yet been produced for any cereal grains or legumes, the basic food crops of the earth.

It has been estimated that only 50 per cent or less of the nitrogen and less than 35 per cent of the phosphorus and potassium applied as fertilizer in the US are recovered by crops. The recovery of fertilizer nitrogen in the rice paddies of the tropics in India is only 25 to 35 per cent. The balance is lost to the environment. Denitrification losses nitgen to the atmosphere. Nitrification encourages losses in the soil from leaching. Nitrification is also a prerequisite to losses from denitrification. Food production and crop productivity could be greatly improved if these enormous losses, particularly in the warm soils of the tropics, could be even partially reduced. The single factor, recently identified, as responsible for failure to increase rice yields on Asian farms is the low level of nitrogen fertilizer available.

A world-wide annual loss of 12 to 15 million tons of nitrogen fertilizer can be ascribed to denitrification alone. Losses from nitrification are equally as great. Recent assessments of the fate of soil applied nitrogen fertilizer suggest that 25 to 35 per cent is lost both by nitrification and denitrification. Nitrification inhibitors, both natural (the seed of the Neem tree in India) and synthetic (nitropyrin), applied with ammonia or urea, are effective deterrents to leaching and atmospheric losses of nitrogen. Denitrification inhibitors will also soon be available. The result could be a significant reduction in fertilizer cost and usage. Non-renewable resources would be preserved. Crop productivity would be increased, and a potential environmental hazard reduced.

Denitrification occurs only under anaerobic soil conditions. This may be alleviated by reducing nitrification, soil compaction, improved drainage, use of soil improving crops, and careful attention to irrigation procedures. Research emphasis on reduction of losses of nitrogen fertilizer applied to crops should hold priority equal to that for devising means of nitrogen fixation utilizing renewable, rather than non-renewable resources.

The facilitation of nutrient uptake by microorganisms (fungi) in symbiotic associations with the roots of higher plants is emerging as one of the most exciting frontiers for enhancement of crop production in the 21st century. The efficiency of plant roots in absorption of nutrients from the soil can be greatly improved. Mycorrhizae, particularly the endomycorrhizae and the subgroup referred to as vesicular-arbuscular, may result in large increases in the uptake of phosphorus and other poorly mobile nutrients. Almost all crops respond. Vesicular-arbuscular mycorrhizae can be viewed as fungal extension of roots. They help roots absorb fertilizer and can stimulate growth and nitrogen fixation by legumes, especially in phosphorus deficient soils. There are superior strains of mycorrhizae, and crops can be inoculated with them. Mycorrhizae fungi have been reported to increase significantly the yields of cereal grains and many vegetable crops. The profound effects of these fungi have only recently been appreciated. They facilitate nutrient uptake by changing the amounts, concentrations, and properties of minerals available to plants both in forestry and in agriculture. The potential is not only for a substantial increase in conventional crop production, with conservation of non-renewable resources, but to expand the land base so that plants can be grown in areas which now have an unfavourable climate and non-productive soils.

Foliar applications of fertilizer have long been declared the most efficient method of fertilizer placement. Technology of application, however, is still lacking. Prevention of the Khaira disease in India rice paddies by foliar application of zinc in 1969 by Dr Y.L. Nene at the UP Agricultural University at Pant Nagar is well documented. Future yield barriers may be broken on other crops by utilising the absorptive capacity of leaves, as well as the roots, for applying essential nutrients at crucial stages of development. Great hope was expressed for nutrient foliar sprays following results on soybeans in the USA during 1975. Extensive experimental foliar spraying of nutrients in all the major soybean producing areas during 1976 through 1978 for yield enhancement have not, however, been confirmatory of the outstanding results achieved in Iowa during 1975.

Environmental-climatic stresses, alone or in combination, constitute the primary limiting factor(s) for increasing and expanding the production of many, if not most, of the world's crops. Those that limit crop productivity include drought, cold, heat, salt, toxic ions and air pollutants. Plants, unlike people, livestock, and other animals, are immobile. They are fixed by location. Environmental adaptability, thus, becomes pre-eminent. **Any means of increasing the resistance of plants to high and low temperatures, drought and water stress, adverse soil conditions, and other environmental hazards holds great promise for enhancement of the amount of food, as well as the dependability of the supply.** Through the use of short season, early planted, single-cross maize hybrids, commercial production in the US has moved 500 miles further north during the past 50 years. Spring wheat in the USSR has moved further north by 200 miles. The winter wheat zone could also be moved 200 miles further north by the 21st century with a new level of winter hardiness now genetically available. Hybrid sorghum and millets are moving into hot-dry areas, not heretofore adapted for cereal grain production. The new synthetic species, triticale (a cross of wheat and rye), has resistance to aluminium toxicity. Thus, millions of acres of heretofore non-productive land can be opened for food cropping. Characteristic of the new seeds (rice and wheat) of the "green revolution" are varieties that are day-neutral (respond to any length of day) and will produce grain at any latitude. There are also genetic strains of rice, wheat, and barley having greater resistance to both cold and alkalinity. This, coupled with earlier maturity, has made possible a "two paddy system" in South Korea where heretofore only one crop of grain per year could be grown. Potato varieties have been identified in the high Andes with modest frost resistance and cold hardiness.

Plants can be made more "climate-proof" by genetic improvement and by appropriate soil, water and pest management. The use of weather and climate information in the selection of crop varieties for a particular climatic setting, the strategic planning of the size, the type, and operation of an irrigation system, or alternative strategies in pest management can reduce the adverse effects of climate and weather on crop productivity.

Controlled environment agriculture can greatly increase food crop productivity and the dependability of supply. By far, the most extensive means of modifying the environment is irrigation. Looking to the future, India, Sri Lanka, the USSR, and Bangladesh expect to double the amount of irrigated land, and they have the renewable water resources to do it. This will not only increase the productivity of a given crop, but will enable year around production. Stability of production from year to year will be greatly enhanced. But, it will require vast capital inputs. Irrigation will also greatly increase food security, through greater dependability of supply and with less vulnerability to climate and weather variables. Largely through irrigation, new seeds, and fertilizers, the People's Republic of China has doubled the yields of the major foodgrains in two decades, despite recurring droughts. The national Planning Commissions of India and the USSR and the Prime minister of Sri Lanka look to vast new irrigation schemes as the primary catalyst for renewed agricultural and economic development and for food security.

The most intensive food producing systems on earth are those where crops are grown in greenhouses or under the protection of other structures. This offers the ultimate in stable production at high levels. The chief constraints of fully controlled-environment agriculture are that it demands a maximum in capital, management, and resource inputs. It is high technology and resource intensive. Nevertheless, great agricultural production potential exists. Hydroponic culture facilitates control of both the top and root environments. Carbondioxide enriched atmospheres can be employed. **The latest developments in hydroponics have occurred in northern Europe with the Nutrient Film Technique. This is the most sophisticated technology yet conceived for improvement and control of crop production in greenhouses.** It takes full advantage of maximising control of the total top and root environment and optimising the uptake of both water and nutrients by plant roots.

There are many chemicals, endogenous and exogenous, at hormonal levels that offer control of biological processes that limit crop productivity. The use of sugarcane ripeners, chemical inhibitors of plant growth, for enhancement of sugar production in Hawaiian sugar plantations is now standard practice. Sugar yields are increased by 10 per cent. An equal increase is achieved with gibberellin to promote growth during the "winter" months. Ethylene generating compounds have greatly improved the flow of latex in the commercial production of rubber trees, and the accumulation of natural rubber in the stems and roots of the desert guayule plant is markedly stimulated by treatment with 2-(3, 4-dichlorophenoxy) triethylene. Lodging is prevented and yields of wheat in western Europe have been greatly enhanced by treatment with a chemical now designated as "Chloromequat". The latest is Triacontanol, which in milligram quantities per hectare may significantly increase the yields of several major food, as well as vegetable, crops. Currently, there are 40 major chemical companies, most of them in the US, that are engaged in chemical growth regulator research. The use of chemical growth regulants for crop production in the tropics needs exploration.

Until now, there have been few reviews on the practical uses of chemical regulators and crop productivity, apart from those dealing with the acquisition of new scientific knowledge. There has been little effort to focus growth regulator studies on significant food crop species or on whole plants of economic importance. Most of the locally financed agricultural research in developing countries has been on plantation and export crops. Food crops for domestic consumption have been largely ignored. What is needed in the chemical growth regulator field is for scientists, especially in developing countries, to participate personally in field research to solve food production problems, rather than to contribute to the burgeoning growth of scientific journals. Much of the information from growth regulator research in the plant sciences has not been brought to bear on the practical problems of crop productivity.

Economic simulation models are being developed for projecting world patterns of grain, oilseed, livestock production, grain exports, prices, stocks and market stability. Weather-crop yield models are now available to assess the likely impact of weather that has already happened or is forecast on crop productivity. There is an urgent need for research on climate models to arrive at predictive warnings of climate change.

Agricultural research, till now, has been primarily concerned with increasing crop yields by the use of fertilizers, pesticides, irrigation, better management, coupled with variety development and genetic improvements. Little attention has been given to control of the biological processes that limit crop productivity. The stage is now set for further yield increases by the use of chemicals for physiological manipulation of the plant. It is likely that a useful role for growth regulators can be found for all crops, and for all biological processes, and for every developmental stage.

Animal Agriculture in the World Food System: There is a sound basis for efficient animal production in every nation in the world, even if only on a limited scale. Two-thirds of the world's agricultural land is in the form of permanent pasture, range, or meadow. Sixty per cent of this land is not suitable for growing cultivated crops. Ruminant animals can harvest this vast food resource, otherwise of little value, convert it to milk and meat. They are natural protein factories, and become a living storehouse of mobile food. They can also utilise by-products and waste materials that would otherwise have little value. In 1974 when global food reserves reached a dangerously low level, the food animals of the world not ordinarily slaughtered during the year constituted a 40 day reserve food supply. This exceeded the available grain stocks which provided a reserve of only 28 days.

Issues often become heated as to the future role of livestock in our food systems and for large investments in food animal research. Livestock have been declared as inefficient for supplying food to people. Meatless days and vegetarian meals have been recommended in many industrialised nations and practiced by action groups to cut back food animal production in favour of grain of human consumption. It has been erroneously declared that as much as twenty pounds of grain are required for each pound of gain in cattle. Some have stated that by the year 2000 food animals will be found only in zoos. Nevertheless, the rapid increase in the sales of animal feeds, particularly of soybeans and their products, to developed countries is probably the singlemost important aspect of recent US agricultural export which now approximate $30 billion annually. There is an increasing demand for meat, milk and eggs. Much of the recent trade expansion in the western world has occurred with animal feeds. There are in animal agriculture important economic, health and safety, environmental, socio-political, resource inputs, and productivity and biological research areas that need exploration. Such studies in concert have not been designed. A major conference designed to identify crucial areas for further research and action is being planned at Boyne Mountain, Michigan, USA, May 4-9, 1980. It is being sponsored by the Michigan State University Agricultural Experiment Station, the College of Veterinary Medicine, four professional societies, the United States Department of Agriculture and the American Association for the Advancement of Science. It will be patterned after the "Crop Productivity—Research Imperatives" conference that the Machigan Agricultural Experiment Station and the C.F. Kettering Foundation jointly sponsored in 1975, the recommendations of which have since had a major impact on research funding policy in the plant sciences in the USA. Research, thus far, in animal agriculture has been confined primarily to the enhancement of productivity through genetic improvement, better feeding, disease control, improved management and control of the environment. Options in each area will follow herein.

The current erosion of support of basic research for enhancement of crop productivity must be corrected. There is an unprecedented opportunity to put reserve technology to work, create new technologies, manage our resources, and pursue modern means of communicating the results of research to producers. There are no limits or bounds to the innovation and creativity of the human mind. The human resource is still, by far, the most important asset we have.

Enhancement of productivity through animal health must include control of major epidemic infectious diseases, minimising losses from many other epidemic diseases, control of endemic diseases, studies of the economic impact of animal diseases and fundamental research on the biological factors relating to host resistance to disease and parasite infections. World mortality losses from disease and parasites annually exceed 50 million cattle and buffalo, and 100 million sheep and goats. A loss of $20 billion occurs annually from animal diseases in the US. Reduction in losses from epidemic and infectious diseases up to 50 per cent is a possible and realistic goal.

Substantial gains in the utilisation of feeds and genetic improvement and increased fertility can come from developing genetically superior animals for low quality diets, increasing the availability of lignin and cellulose which are the major feedstuffs in many developing countries, improving the use of non-protein nitrogen (urea-ammonia) for conversion by ruminants into protein, improved feeding and management at critical times in the life cycle, and eventual development of the rumen bypass for increased protein utilisation and appetite stimulation.

Improved fertility will come from estrus synchronisation or control of the reproductive cycle, semen preservation, improved pregnancy detection, multiple births, and superovulation. All these can be maximised to increase the number of offspring per breeding unit. Low reproductive efficiency of livestock now results in 50 per cent of potential animals lost. Twinning in dairy cattle can become a reality through hormone treatment for superovulation, controlled breeding, recovery of fertilized eggs and non-surgical embryo transfer to recipient females of lesser breeding value.

Non-surgical embryo collection is now aided by extremely sensitive microscopic tehniques for embryo sexing, freezing, and implantation. This could revolutionise genetic improvement and productivity in dairy cattle. Embryo banks of sexed and frozen embroys may soon be available for cattle breeders to use with either surgical or non-surgical implantation techniques. This could mean for the 21st century twin males for meat animals and twin females for each superior milk producing dairy cow.

All of the above—improved production and utilisation of feeds, animal disease control, and genetic improvement—are of equal priority. Little progress in better utilization of feeds can be achieved without timely inputs for disease control, genetic improvement, and increased reproductive efficiency. Similarly, research on animal disease control would be of little value, unless accompanied by better feeding. In fact, improvement of the breeding stock of animals may be impossible in some agriculturally developing countries until certain diseases are controlled and some nutritional disorders alleviated.

Controlled environments constitute a realm of technology scarcely tapped for livestock production. They are widely used now for poultry and swine, and are under test for sheep and goats. Programmed lighting (photoperiod) and temperature regulation can have marked effects upon crop productivity. Similar variables should be vigorously pursued relative to their effects on dairy cattle productivity, feeding efficiency, rates of gain, hormonal relationships, and reproductive behaviour. A photoperiod extended to sixteen hours in mid-winter in Michigan has resulted in a 10 per cent increase in milk production with high producing dairy cattle. This is achieved with no additional feed inputs.

Results in animal agriculture can be phenomenal when modern livestock production technology and improved forage programmes are introduced in a developing country and combined with local scientific inputs. Such is the "white revolution" which is emerging in the Punjab and Gujarat states of India. Over a million farmers with the water buffalo as the milk animal have formed cooperatives for marketing and distribution of milk to the almost unlimited markets in Bombay, New Delhi, and other large cities. It is known as "Operation Flood". Milk production at the farm level is enhanced by genetic improvement through artificial insemination, better feeding, utilising the highly productive hybrid Napier grass, and disease control. The result is a dependable daily cash income, better utilization of wastes and by-products, improvement of the nutritional status of poor people, and an enterprise which is labour intensive at the production level. We are happy to report that two Michigan State University graduates from India, Dr. Verghese Kurien and H.M. Dalaya, have been responsible for this most remarkable development. Livestock in agriculturally developing nations serve as important sources of food, fibre, dietary improvement, income, power, fuel, and fertilizer.

Forages indirectly constitute an enormous food resource. They provide a feed supply for approximately 2.5. billion ruminant animals useful to man. The primary, and often exclusive, feed for livestock in developing countries are forages. Forages not only serve as feed for ruminant animals, but they may reduce soil erosion and enrich the soil. They are produced in many places where cultivated crops cannot be grown. Their production is an essential component of appropriate, long-term land use.

There are for the 21st century many opportunities to enhance the productivity of range and pasture resources. For the US, it is technically and economically feasible to double the carrying capacity of rangelands. A coordinated national programme of improved plant species (both legumes and grasses), vegetation modification, mechanical soil treatments, fertilization, water control, and livestock management would add a tremendous resource to the food and feed productivity of the nation. Similarly, the land and water resources for forage production in the tropics and developing countries are enormous. Here, there are 1.5 billion hectares of potential land for forages that have little utility for cultivated cropping. Three distinct areas in the tropics are remarkably adapted for forage production—the lowland tropics, the high elevations, and the savannah. Livestock grazing in many areas is possible throughout the year. Many mixtures of legumes and grains provide the balance between energy and protein. Improved nutrition for ruminant animal production must come largely from improvements in the production and management of forages.

The potential genetic improvements for forages are exciting. Coastal Bermuda grass F_1 hybrids in the south-eastern US yield twice as much forage as the Common Bermuda grass. Hybrid Napier grass is highly productive, and provides an excellent feed for dairy cows in the tropics. This is particularly true in India. The transpiration and resultant water requirements in hybrid pearl millet may be genetically reduced by 26 per cent. There are at least four frontiers of technology for improvement of forage crops for livestock—higher yielding types, increased nutritive values, improved harvest techniques, and the merger of production and utilisation system.

Society is subject to the constant propaganda of presumed impending calamitous events. Currently an area of concern widely publicised is the proposed climatic changes that will soon be initiated by a rising level (0.4 per cent per year) of atmospheric carbondioxide. There are dire predictions of warming trends with shifts in precipitation patterns that may cause serious dislocations in agricultural production. The prospects of climate change from increasing atmospheric level of CO_2 between now and the 21st century, however, should not frighten agriculturists.

The most important feed constituent in forages is cellulose. It is the world's most abundant organic compound. World-wide production of cellulose is estimated at over 100 billion tons (dry weight) per year. That is equivalent to approximately 150 pounds of cellulose produced daily for each of the earth's more than 4 billion inhabitants. Until now, its conversion into food on an economic basis is accomplished only by ruminants. The energy equivalent of cellulose produced on this earth is about 6 times greater than current global utilization, in spite of an average efficiency of conversion of solar irradiance of only a few tenths of one per cent. Obviously, the frontiers for improving food and feed supplies through this route for the 21st century are enormous.

Issues for the Future:; Within the very shadow of unprecedented progress for enhancement of food crop productivity has come a plateauing of yields of the major food crops of the earth. Yields of wheat, maize, sorghum, soyabeans, and potatoes in the United States have not increased since 1970. This is true of maize, potatoes, wheat, and cassva in Latin America. The yields of rice in India, Bangladesh, Indonesia, Nepal, Pakistan, Philippines, Sri Lanka, and Thailand were the same in 1976 as in 1970, even with a substantial input of high yielding varieties. Overall world grain yields have declined. Increased production has been achieved largely by bringing more land under cultivation. By this means, and as a result of unusually favourable weather, we expect in the USA this year to have record corn and soybean crops and the second highest wheat crop in history. This is not true, however, of the USSR and Canada where there are serious shortfalls of wheat.

The phenomenon of yield plateauing needs careful analysis. Possible causal factors include fewer options in the use of water, land, energy, fertilizer, pesticides, and for mechanisation. These resources are becoming more costly, subject to more constraints and less available. Some are non-renewable. Meanwhile, soil erosion continues unabated nationally and globally. Topsoil continues to be lost at an enormous rate. Soil organic matter is still on the decline. There is greater soil compaction from excess and untimely tillage. Air pollution is becoming global and progressively more severe. Additional land areas brought under cultivation may be less productive. Some would credit the recent plateauing of crop yields to adverse and fluctuating climate and weather. Season-to-season or interannual variations, however, are far more significant than any identifiable long-term trends. There is no evidence that technology has reduced the sensitivity of grain yields to weather. On the other hand, technology may be working to insulate yields from unfavourable weather. Many of the recent advances in technology which could enhance productivity are highly dependent on use of more energy resources. The rising costs of energy relative to crop prices may be limiting the adoption of new practices that could increase yields. If this is true, then the plateauing of yields may be expected to continue. The obstacles to increased crop productivity in many nations may be more political than technological. Regulatory and financial constraints on the use of labour, chemicals, water, and energy are increasingly costly and stifle production.

Finally, there has been a global erosion of public support for agricultural research, not only in manpower, but in new equipment and facilities. Particularly disastrous has been the lack of effort for mission-oriented basic research relating to the biological processes that control and limit crop productivity. In 1976, scarcely $15 million in total was being investment in the USA for combined research on photosynthesis, biological nitrogen fixation, and cellular approaches to plant breeding. The human resources for a much expanded effort in these three areas are available. It is difficult to assess where the fault lies.

The global investment in the agricultural research and development budget is only three per cent of the total. This means that globally we are spending $3.5 to $4 billion annually of a research budget of $120 billion. The big spenders are military (24 per cent), basic research (15 per cent) with space and energy each at 8 per cent. Almost twice as much is spent for pollution control as for food production. The US provides almost one-third of the total funding for agricultural research. Yet the annual rates of return on agricultural research expenditures are in the order of 50 per cent. What then accounts for the very low support for agricultural research? One explanation may be that research benefits spill over to other countries, regions, and to consumers thus reducing the incentives for local support. The other is the low image of agricultural research and the failure of the voices of agricultural scientists to be heard. I was asked at a Congressional hearing on July 25, 1979, sponsored by the US House of Representatives Committee on Science and Technology, as to where the fault was. In the US it resides in the White House, the Office of Management and Budget and the US Department of Agriculture which still does not have research as a major mission. There are few effective, knowledgeable and articulate spokesmen for agriculture. In my opinion agricultural research policy in the US is determined by 20 to 25 people who reappear in almost every decision making body. In this policy cadre there is little or no representation from the traditional agricultural production sector. Correction of this affair may well be our greatest need and responsibility for the 21st century.

While future increases in agricultural productivity will come from combinations of new technologies, resource inputs and economic incentives, the impact of ragulatory actions must also be considered. Technological developments that would likely diminish environmental problems and human health hazards, and be non-polluting would include all genetic improvements for increased productivity, yield stability, and greater resistance to competing biological systems and environmental stresses. Greater photosynthetic efficiency and biological nitrogen fixation, as well as solar energy generated abiotic nitrogen fixation would also be regulatory neutral. Improved nutrient recovery by crops from the soil generated by reductions in both nitrification and denitrification, and microbial (vesicular-arbuscular endomycorrhizae) facilitation of nutrient uptake would lessen regulatory constraints against fertilizer usage, enhance food production, and, at the same time, preserve non-renewable resources. Greater photosynthetic utilisation of atmospheric carbondioxide would reduce photorespiration, increase yields, and lessen a potential environmental hazard. Integrated pest management systems should reduce losses from pests, be more environmentally sound, less polluting, more cost effective, and should help stabilise production at high levels. Greater efficiency in the use of land, water, energy, and atmospheric resources (CO_2) should lesson the regulatory impact. Classical examples are conservation tillage and drip irrigation. Any technologies dependent on solar energy would be dispersed, non-polluting, add to the earth's resources, and preserve the nonrenewable energy resources we now have. Technologies for farmers with limited resources should have minimal regulatory constraints. Finally, any new food processing technologies relating to dehydration, compression, food irradiation, and retortable pouches would have minimal regulatory impacts.

Conversely, other technological developments may encounter moderate to severe regulatory problems. These would include precipitation augmentation through cloud seeding, any introduction of toxic chemicals in the environment for disease or pest control, chemical or hormonal regulation of biological processes, and increased irrigation by conventional systems. Food processing technologies likely to be objects of additional regulatory attention would be all aspects of fermentation preservation, and any developments related to extruded, engineered or otherwise formulated foods.

The Appropriate Technology: Concept stems, in part, from the realization that many of the "hard-high" technologies relating to crop production as developed in western industrialised nations may be "inappropriate" for the developing world, and may not be appropriate for the future destiny of the developed world. It seems, in part, from "Small is Beautiful" and "bigger may not be better". The focus is often on needs of developing countries. The appropriate technology concept attacks the large scale, centralised, monoculture capital-energy-transport-skill intensive technology of modern agriculture as damaging to the environment and to human welfare, especially to the welfare of the non-affluent and the international poor. Conversely, "appropriate" technology focuses on labour-intensive operations, small farms, polyculture, heterogenous germ plasm, farming systems, little or no fertilizer or chemicals, biological controls for insects and diseases, and conservation tillage. It emphasises the non-polluting, decentralised inputs derived from solar energy, and is defined by its benign environmental and equitable and humanistic impacts.

Technologies, as developed by the industrialized western developed nations, are generally highly mechanised, labour saving, large scale; and are capital, management and resource (energy, water, fertilizer, pesticide) intensive. For 40 years, the USA has aimed at greater efficiency in production, irrespective of resource inputs which, until recently, have been cheap and plentiful. Still, American agriculture can be viewed as a model for much of the world. Many, including much of India, have shared in its success and the Land Grant system of publicly supported research, teaching, and extension. American farmers are industrious and well educated. It is a competitive industry. There are strong supporting casts of input suppliers, marketing firms and good leadership. There is, however, no one model that fits all nations, times, and circumstances.

Among some of the global problems are poverty, malnutrition, underemployment, scarcity of resources, shortages of energy, soil erosion, toxic chemicals in the environment, and the adequacy and dependability of our food supply. Appropriate technology presumably is designed to alleviate these problems. For crop production, it means strategies for poor farmers that focus on technologies that are labour-intensive, result in stable production of conventional crops at high levels, and on research that is scale neutral as to farm size andis non-political. It implies small, less energy intensive equipment. It implies smaller highly productive units. It implies use of renewable rather than non-renewable resources. It relates to solar versus fossil energy. It means emphasis on construction of storage with local renewable materials for preservation of indigenous production which provides production incentives, food security, a degree of market control, and preserves desirable seed stocks. It means optimisation of the production of biologically fixed nitrogen versus that which is chemically fixed. Crop rotations, intercropping, and cropping systems are emphasised. It means pest management without pesticide chemicals. Organic gardening is a part of the movement.

The comparative productivity of such crop production systems with those of contemporary American agriculture has not been accurately assessed. It has not as yet been established by anyone as to what an environmentally sustainable set of agricultural technologies might be. This is a challenge for the 21st century, Technologies can be labour intensive, small scale, and economically viable if they result in increments of production. This is true of hybrid cotton production in India. Thousands of labourers are required to hand pollinate the flowers with a resulting doubling of yields.

Much of the rhetoric of the "green revolution" centres on the resulting inequalities between large and small farmers. Most of the international development programmes now look to the small farmers as the central figure. The small farm can be a viable economic unit. Technologies addressed to small scale, labour intensive, capital, and resource sparing crop production systems would capture an unexploited frontier. The incomes of a billion people depend on farms of five hectares or less. Seventyfive per cent of all farms in tropical Asia are smaller than two hectares. In Japan, 92 per cent are two hectares or less. The average farm size in the Philippines is three hectares. Sixtynine per cent of all farms in central America are less than five hectares; and the average farm size of 20 African countries is only 5.4 hectares. The output per hectare on these mini-holdings can significantly exceed that of the large US farms. Small increments of fertilizer, water, or pesticides, or other technologies or social or economic incentives in India, south-east Asia, Latin America, or Africa would have telling effects on food production.

> The goals of mechanisation in agriculturally developing nations should be viewed differently. For most, the emphasis on increased production per worker and convenience in industrialised nations is not applicable. Systems are needed to optimise labour utilisation and crop production per unit area per unit time. The need is often for more man-hours per cultivated hectare per year, more days worked and more uniformly distributed labour throughout the year, and more food produced per hectare.

The biological limits of crop productivity have not been achieved nor defined. Grain production for the 1977-78 crop year was an all-time record of 1300 million metric tons. The global increase in yields of the major cereal crops since World War-II is without precedent in agricultural history. Particularly significant have been some of the records in Japan, western Europe, Mexico, Colombia, the USA, and the Punjab state of India. The most remarkble crop production record for all time has been in Punjab. A three-fold increase in food grain production was achieved in 10 years (1966 to 1976). The gap between what production is now and what it could be is the great food reserve on which nations can depend and call upon for the support of future generations. The current world record for corn production is 352.6 bushels per acre. The theoretical maximum potential yield, however, is 1066 bushels per acre. This could be achieved with optimum light, carbondioxide, water, plant nutrients, and with no diseases or insects or stresses of any kind.

Many have estimated ultimate or maximum crop productivity. Buringh *et al.* have computed productivity in grain equivalents to be 40 times its present global level. Biological limits have not been achieved for the productivity of any of the major food crops. Average, world record, and estimated yields for the best farmers for some of the major food crops is given in table.

The current and potential productivity of nine major crops—maize, sugarcane, sugar beets, rice, wheat, soybeans, peas, potatoes, cotton are reviewed by Evans.[6] Record yields now are ascribed as about one-half of the potential estimated maximum yields.

A careful review of parameters responsible for the ever increasing record yields of corn could be informative for the design for future models of crop productivity. All have occurred in the USA, and two of the most recent ones in Michigan. The case histories are available for analysis. The study of comparative productivity of various successful agricultural ecosystems could be most rewarding. New technologies, resource inputs, and economic incentives are the parameters which will determine future agricultural crop productivity. The combinations that work will be site and location specific.

Maximum yield trials should become a major part of agricultural research. The intent would be for scientists to constantly test the limits of available technology, as well as their ability to put together technology components in a systems approach to achieve maximum production. This is what the farmer is expected to bo. Some scientific assistance would be helpful. It should also motivate scientists in interdisciplinary cooperation.

Predictive and simulation models for crop productivity are determinants of outputs. The operational approach for maximum yields must be one which integrates the total inputs system. Many interesting systems and subsystems enter into total crop productivity. These are climate and the weather, cultivars, soil nutrients, soil structure, temperature, and sunlight. There are cropping systems, pest management systems, water management systems, soil management systems, and tillage systems—to name a few. There are environmental and public health concerns. A total systems approach which is site specific is needed. Further major breakthroughs in agricultural productivity will come only if the total agricultural system is considered. This will be true, also, of future research strategy. Simulation models depicting the growth, development, and yield of major food crops are in progress for maize, sugarcane, sugar beets, and the patato.

Average Best and World Record Yields

Food Crop	Average 1975 (US)	Best Farmers (US)	World Record	Ratio: Record/ Average
	(Metric Tons/Hectare)			
Maize	5.4	14.1	22.2	4.0
Wheat	2.1	6.7	14.5	7.0
Soybeans	1.9	3.4	5.6	3.0
Sorghum	3.3	16.8	21.5	6.5
Oats	1.7	5.4	10.6	6.2
Barley	2.4	8.1	11.4	4.8
Potatoes	26.6	67.3	95.0	3.6
Cassava	8.0	40.0	60.0	7.5
Rice (crop/112 days)	2.5	8.0	14.4	5.8
Sugarcane	50.0	100.0	250.0	5.0
Sugar beets	50.0	80.0	120.0	2.4

Models have also been developed by members of the agricultural community relating to the systems with which they work. Here, the needed interdisciplinary input often falls short. There are pest-crop ecosystem models. Economic-simulation models are being developed for projecting world patterns of grain, oilseed, livestock production, grain exports, prices, stocks, and market stability. Weather-crop yield models are now available to assess the likely impact of weather that has already happened or is forecast on crop productivity. There is an urgent need for research on climate models to arrive at predictive warnings of climate change.

Most all major food crops grown in the USA, with the possible exception of the sunflower, are plant introductions. The potential wealth of new crops as resources has often been emphasised. For the USA the sunflower is the latest excitement. Over 3.5 million acres were produced in 1978; up from less than a million acres in 1976. There is a healthy export market for the oil, gain producers can rotate their crops, the work load is levelled out, and they are productive and easy to grow. The current and potential importance of new oil crops, plants as sources of drugs, undeveloped tropical crops, rubber crops, and plant derivatives for insect control are possibilities. Tropical fruits with great promise in India, but little known in the western industrialised world, include the Mangosteen, Mamey Sapote, Pummelo and Lanson. A US National Academy of Sciences' report (1975) provides an inventory with a description of 36 underexploited tropical plants with promising economic value. Included are four cereals, three roots and tuber crops, four vegetables, seven fruits, five oil crops, five forages, and eight having industrial or other uses. Among the vegetables is the winged bean of the tropics. It is an exceptional legume. All plant parts are edible. The green pods, leaves, and seeds are rich in protein and vitamins. The tuberous roots, unlike cassava, sweet potato, taro, etc, are uniquely rich in protein. The seeds are a source of edible oil.

Other plants are emerging as promising new crops for food, feed and industrial uses. These are Amaranth, Leucaena, Guayule, and Jojoba. Many species of Amaranth can be used for human food, both in the USA and in the tropics. The most common in the USA is **Amaranthus hypochondriacus**. Both the grain (seed) and the leaves may be eaten. Amaranthus is a highly productive C_4 plant and responds luxuriantly to added nitrogen.

Leucaena is a promising forage legume for livestock. It thrives as a small plant, shrub, or tree in the tropics. Being a legume, it supplies its own nitrogen. It is particularly valuable for marginal land and low income farmers. It suppresses soil erosion on slopes and hillsides.

One of the most productive plants on earth is hybrid Napier grass. Its potential as a superior forage for dairy production in the tropics is now being demonstrated as a part of the White (milk) Revolution occurring in the Gujarat state in India. As a native of Central America, it has now spread throughout all tropical countries, including the islands of the Pacific. Its use in forage-livestock systems has not been developed, but can be expected to have a major impact on future animal/agricultural development throughout the tropics.

Jojoba is a desert shrub with remarkable resistance to drought, high salinity, and temperatures that are lethal to most other plants. It is native to the Sonoran Desert that covers parts of Mexico, Arizona, and California. Jojoba nuts contain an oily liquid (about 50 per cent by weight) which makes a lubricant base superior to that derived from sperm oil, which is strategically important.

Guayule is a shrub that grows in the deserts of North America. It provides an alternate source of natural rubber almost identical with that of the rubber tree.

Agricultural systems where two or more useful plants are grown simultaneously will receive increasing attention. Farmers with limited resources in the tropics and subtropics have long used this technology for increasing food production and cash income. Legume-cereal grain combinations are most common. Many terms have been employed to describe the systems of polyculture involved. They include multiple cropping, maximum cropping, mixed cropping, intercropping, relay planting, interplanting. and interculture. Results generally indicate that polyculture is beneficial to crop production. Total crop yields may be substantially increased. There are reports where each crop, in combination with another, produces more than if it were grown alone. The result is a very significant increase in total production when the values of each are added together. More nutrients are delivered into the biomass produced. Water use is more efficient. The potentials for polyculture cropping systems research, the combinations possible, the unknowns of root interactions, and special considerations for the semi-arid tropics have been outlined. Definite limitations are imposed by polyculture, however, in the harvest of the crop and essentially upon any farm operation which is to be mechanised.

A major research effort should be directed toward the more efficient use of solar energy for crop irrigation. The approach should be most opportunistic, since the greatest water needs are usually positively correlated with solar energy intensities.

Future Determinants of Agricultural Productivity : Never was the time more opportune to seek for greater agricultural production. Ninetyfive per cent of the food resources of the earth come directly or indirectly from plants. They provide feed for livestock and wildlife, and are the primary sources of renewable and natural fibre. They provide the timber and lumber for construction, and they are the source of firewood. Many products for industrial uses are derived from them. There are about 25 crops that literally stand between man and starvation. Projections of the World Food and Nutrition Study indicate that food production must be increased by about three to four per cent per year to the end of the century to meet the needs of annual population increases and the demands of an ever increasingly affluent society. This poses the greatest challenge ever presented to those engaged in food production. The present plateauing of crop yields is a significant reversal. The ingredients of productivity—new technology, resource inputs and economic incentives must be reassessed. The current erosion of support of basic research for enhancement of crop productivity must be corrected. There must be improved management, utilisation, conservation, and protection of the resources (climate, land, water, energy, fertilizer, pesticides, machinery) essential for the productivity of crops for future generations. The potential contributions of research have been detailed and priorities listed. Major changes in policy relating to research allocations, organisational prerequisites, and institutional structures are called for. There must be a reaffirmation and recognition by American and international academicians that agriculture is a respectable and modern science. A move is on to have the sciences of food production and agricultural systems represented within the International Council of Scientific Unions (ICSU), A Committee on the Application of Science to Agriculture, Forestry, and Aquaculture (CASAFA) has been proposed and approved (September, 1978) by the General Council of ICSU. There is still an urgent need to elevate the agricultural sciences to the realm of respectability enjoyed by other disciplines in academia. This problem is currently greater in India than the USA.

The potential capacity for global crop production is enormous. Gains in agricultural output came almost entirely from increases in area cultivated until the mid 20th century. Since World War-II other than land resource inputs (water, fertilizer, machinery, pesticides) have played a major role. Crop research strategy has been "to grow two blades of grass or two ears of corn where one grew before"[7] irrespective of resource input. Greater production efficiency measured by output was the goal. The result was plentiful food at low cost. Meanwhile, almost all existing agricultural technologies in the USA and some other industrialised nations, heavily dependent on fossil fuels and chemicals, have evolved during an era characterised by low cost and abundant energy. Few agricultural scientists, even as of this writing, recognise the impending impact of resource constraints, the high fossil energy subsidy to American agriculture cannot endure. The agricultural output of the USA, and many other developed nations, has been closely tied to the availability of fossil fuel inputs. New varieties of crops (wheat, rice, maize, potatoes, sorghum, millet) have also been developed that are highly responsive and dependent on industrial (energy) inputs of fertilizer, pesticides, irrigation, and mechanisation. Direct spin-offs of an energy intensive agriculture include increased specialisation (monoculture), less resiliency, and large scale operations accompanied by a movement away from small and medium sized production units. Costs of land, water, energy, seeds, fertilizer, machinery and pesticides will continue to go up. This will stimulate the development of greater efficiencies in their use. Means of increasing productivity per unit resource input per unit time will command priority for the 21st century.

This is now a worldwide shift from a natural resource based to a science based agriculture. The emphasis is to raise output per unit resource input and release the constraints imposed by relatively inelastic supplies of land, water, fertilizer, pesticides, and energy. Ruttan[8] has pointed out that this has already occurred during the first part of the 20th century in Japan and certain western European countries. Whereas the USA has followed a mechanical technology pathway, Japan has followed a biological one. Increasing yield technology in the USA has lagged until recently, compared to Japan and some European countries, because of the abundance and low cost of resources. It is projected now, however, that by the end of this century and as we enter the 21st almost all increases in agricultural production will be a result of increases in yield (output per unit land area per unit time) and from growing additional crops for a given year on the same land. New high payoff agricultural technologies for the future will be not only those which result in stable production and high yields, but are sparing of resources. They will be the ones which address and offer solutions to global problems, increase the demand for underutilised labour resources, and put people to work more days per year and more productivity.

There are other characteristics of recent world-wide agricultural development. Variability of grain production has been substantially reduced. This has been achieved largely through irrigation and improved pest control. There is also increased food security for a much larger world population. The incidence of famine has declined substantially, and there is the hope that it can be greatly minimised for the future.

The cause of world hunger now is not a shortage of food. It is poverty. World food problems tomorrow and for the 21st century will not be production problems. They will be problems of delivery of getting food where people are, and of purchasing power. Only poor people go hungry. For the first time in history, we have the capability to relieve mankind from the scourges of malnutrition and hunger. Can we meet this challenge for the 1980's and the 21st century? The answer will reside in the decisions of governments as to the management of our resources, attractive economic incentives, and their support of mission oriented basic research relating to the enhancement of food production.

There is an unprecedented opportunity to put reserve technology to work, create new technologies, manage our resources, and pursue modern means of communicating the results of research to producers. There are no limits or bounds to the innovation and creativity of the human mind. The human resource is still, by far the most important asset we have.

It took 40 years for hybrid corn

to be universally adopted by American farmers. For Iowa farmers, it was only 7 years. In India's Punjab, grain production has been increased threefold in 10 years. The time between discovery of new technology and its adoption must be shortened. There is a need to speed the flow of information from scientists in research centres to farmers. New breeds of technologies and technologists are called for. Provision is needed for communication among scientists constituting a blend extending from the applied field worker to the molecular biologist. The time between a basic research discovery and its first application averages 13 years. The half life of a new disease resistant cereal variety is five years. The time from introduction of a new technology until its adoption reaches an expected ceiling is 35 years. It now takes 6-10 years to train scientists to do research. We must force the pace of agricultural development. Attention should be directed toward mission oriented basic research with economically important food crops for enhancement of agricultural productivity. Computers assemble massive amounts of data. Rising demands for food, fibre, and renewable resources as industrial materials speak for a greater investment not only for research, but for the diffusion of knowledge. The responsibility of a scientist no longer ends with a technical report to his professional colleagues in a referred journal. The future viability of the agricultural sciences will depend on how well the results of research relate to the solution of food production problems for the 1980's and the 21st century.

Notes and References

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\ brave new turn in energy crisis

Sudhir Sen
New York

The new energy policy of president Carter is a classic case of much haste and less speed, says the author. He rates the chances of its success slim. The fault, the author says, does not lie in his stars but the president's disingenuous approach. He would have liked Mr Carter to slash the windfall profit tax to one-half to leave enough capital with the industry to finance more costly exploration and development of various energy sources.

MID-JULY, president Carter unveiled a
v energy plan and immediately trig-
ed a fresh round of lively debate. His
sentation was more impressive than
rsuasive; bold in sweep, it was less
.n thorough in preparation; and richly
erladen with rhetoric, it was highly
arged with moralistic overtones which
peared more puzzling than enlightening,
pecially in the context of an energy
sis. The result of all this can only be
nical. For the second time since he
umed office Mr Carter has bravely
dressed what is unquestionably the
tion's gravest economic problem. Yet
is, at best, problematical if he will
ng its solution any nearer than he did
h his ill-fated first plan.

For, strangely enough, the new plan
peats exactly the same basic errors that
ought the much-heralded first plan,
oclaimed as the "moral equivalent of
r", to grief. As in 1977, no blue-ribbon
nmission, not even a reasonably
npetent task force, was engaged to
estigate the many-sided problems, to
igh the pros and cons of the available
tions, and to produce a well-thought-
t integrated plan that would command
widest possible support within the nation. Instead, it was hastily put together in secrecy by a small bureaucratic coterie. Although the energy problems clearly impinge on a number of mutually conflicting special interests, no attempt was made to bring them together and to harmonize them on the basis of acceptable compromises.

Nor was there any semblance of pre-consultation with political leaders—not even of his own party—although it should have been abundantly clear that, without their active support, an energy plan affecting a multiplicity of entrenched interests and their frozen attitudes, could never successfully run the congressional gauntlet. And so the stage has been set for a replay of the same dreary scenario as was witnessed by a bewildered world for a long stretch of eighteen months from April 20, 1977 to mid-October, 1978. Once again the law-makers are getting ready to take the plan mercilessly apart; and once again the special interests are marshalling their forces to fight up to the last ditch to protect their narrow sectoral interests, fancied or real. More than a miracle will be needed for a sensible energy plan to emerge from this legislative battlefield.

Mr Carter's new plan is fatally flawed on yet another count which is hard to defend or to comprehend. As in April 1977, he has once again addressed with much gusto the unfolding energy crisis of the future—of the mid-eighties and the early nineties—but has adroitly sidestepped the crisis that has been on hand at least since the beginning of his presidency : the soaring oil import bill, the huge trade deficit, the battered dollar that has become an engine of inflation at home and abroad.

"I am tonight setting a clear goal for the energy policy of the United States," declared the president in his nationally televised address on July 15. "Beginning this moment the nation will never again use more foreign oil than we did in 1977. Never." From now on every new addition to the demand for energy would be met "from our own production and our own conservation." Accordingly, the "generation-long growth" in dependence on foreign oil would be "stopped dead in its tracks right now", and then reversed as the nation moved to the 1980s. He therefore set another goal before the nation—the dependence on foreign oil would be cut by one-half by the end of the next decade, thereby saving over four-and-a-half million barrels of imported oil per day.

To ensure that these targets would be actually met, Mr Carter announced that he would evoke the authority vested in the president under the Trade Expansion

Act of 1962 to set import quotas. Therefore, for 1979 and 1980 he would "forbid the entry into this country of one drop of foreign oil more than these goals allow." The declaration sounded bold, even heroic; it was accompanied by untypical, table-thumping gestures; as a TV spectacular the performance was rated high. Yet, in reality, it contained more sound than substance. And underneath the glow of rhetoric the tough problems were barely touched.

In 1977, the year Mr Carter chose for fixing the ceiling, the oil imports had set an all-time record—with gross imports hitting 8.8 million barrels a day and net imports amounting to 8.5 million barrels. There was, clearly, no danger of that level being challenged this year. Indeed, Iran's revolution had cut imports in the first half so much that they could rise to 8.8 million barrels a day for the rest of the year without exceeding that level for the whole year. In fact, the average for 1979 is expected to be 8.2 million barrels a day even without any presidential decree ! The US had already given its allies a firm undertaking at last June's Tokyo submit, no doubt with much perspicacity, that it would not exceed the 1977 level of imports in the coming years.

illusory saving

If the import quota set by Mr Carter for 1979 remains comfortably high, the same is true also for 1980. The next year's quota expected to be set between 8.2 million and 8.5 million barrels a day should pose no serious problem. The recession which most economists believe is already under way should in any case dampen the demand for oil and thereby facilitate compliance with the ceiling.

What this means is that the quotas as now fixed will mean no hardship or sacrifice, certainly not this year or the next. But it also means something else: Because the price of crude oil has gone up by 60 per cent since January last, the oil import bill will show a big leap—it is expected to rise by $20-25 billion to $65 billion or more, thereby more than offsetting the improvement in the balance of trade which was clearly noticeable in the last two quarters.

What will be its effect on the dollar ? And on inflation at home ? Will OPEC use continuing inflation and dollar depreciation as an argument for pushing up the crude price once again later this year ? And what happens if Iran's oil output suffers another setback because of its internal instability ? Or if some substantial OPEC members—Nigeria, Libya, Iraq, Kuwait, not to speak of Saudi Arabia—decide to cut back production either to keep the world market sufficiently tight to sustain a high—or higher—price or not to deplete their non-renewable treasures at an unduly fast pace ? These are the questions that have been inexorably pressing for adequate answers. Yet they have been quietly bypassed in the new energy plan.

synthetic fuel

As for the longer range proposals, both conservation and production will play their part to halve the imports by 1990. But unlike the first plan which had totally neglected production, this time it is increased domestic production which has been assigned the dominant role. Gradual decontrol of prices of oil and gas, which is now under way, should, the administration believes, give in due course extra production of about a million barrels a day. However, it pins its hope overwhelmingly on a far-reaching proposal to build up an entirely new synthetic-fuel—or "synfuel"—industry to produce 2.5 million barrels a day by the end of the decade, mostly from oil shale and liquefied coal.

Conservation based on a whole set of mandatory measures, along with new incentives to promote energy efficiency, is expected to yield a saving of half a million barrels of oil a day. The proposals envisage a new law that would compel utilities to cut down oil consumption by 50 per cent over the next decade by switching to coal-generators wherever feasible; rate reforms that would call for higher bills for heavy peak-time users, new legislation ordering gas and electric utilities to provide long-term loans to residential and commercial customers when they need finance for home insulation, thermostat regulators, and similar conservation measures; and a gradual shift to energy-efficient modes of public transportation.

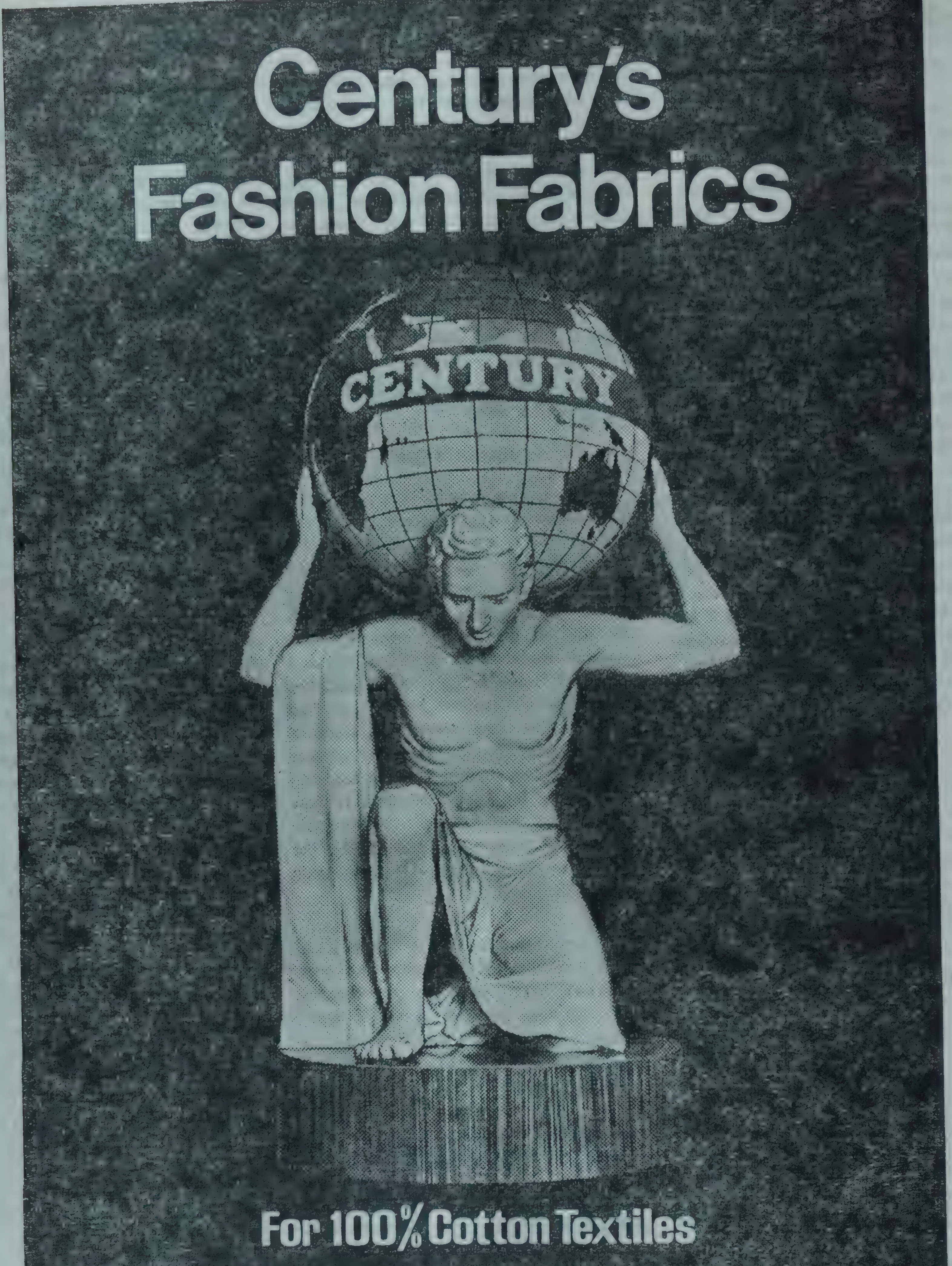
On the organization side, Mr Carter has proposed the creation of two entirely new, high-powered agencies. First, there should be an Energy Security Corporation which would provide financial assistance to the private sector to explore and develop alternative sources of energy supply. One of its first tasks would be to facilitate, through subsidies, the exploitation of huge reserves of natural gas which, according to experts, run into trillions of cubic feet, but lie trapped in hard-to-reach geological formations. The primary concern of the corporation would, however, be to build a mammoth synfuel industry from scratch. It will gasify and liquefy coal, produce methane from organic materials, and extract oil from oil-shale deposits which the US possesses in exceptionally large quantities.

new corporation

Energy from these sources will of course cost a lot more than the world market prices even after their latest hikes. The new corporation would therefore be equipped with broad authority not only to launch joint ventures with private industry and, when appropriate, to build and operate its own facilities, but also to guarantee government purchases and prices for the new fuels.

The second agency, called an Energy Mobilization Board and broadly patterned on the War Production Board of World War II, would be given, provided the congress agrees, wide powers to "coordinate" regulatory procedures at the local, state and federal level, to cut right across the bureaucratic red tape, and to get synthetic fuels and other large energy projects underway with maximum speed and efficiency. Among other things, the board could declare a certain project as one of top priority and then proceed to lay down a strict schedule for all decisions relating to licensing and permits. And, at least in principle, everything else should be subordinated to the exigencies of this predetermined schedule.

Another facet of Mr Carter's energy plan is to create a so-called Solar Bank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with an initial funding of $100 million. The money will be used to enable commercial banks to charge lower interest rates on loans extended for solar power installations in homes and commercial buildings.

As for nuclear power, Mr Carter, fully aware of the sensitivity of the issues involved, moved warily as if picking his way through a minefield. He kept his nuclear option alive; and should he decide to exercise it, he would press for speedy licensing and construction of more commercial plants, but would at the same time insist on stricter standards for the training of key plant employees and for federal inspection of reactor sites. But he would take a definitive decision only after receiving the report of the presidential commission now investigating the Three Mile Island disaster of last April.

As first announced by Mr Carter, his proposal was to spend a total of $140 billion over the next decade to fight the energy crisis. Later, the White House slightly raised the figure—to $142.2 billion—with the following breakdown :

Synthetic fuels and other new energy sources ..	$88.0	billion
Improvement of mass transit ..	16.5	,,
Conservation measures ..	7.0	,,
Relief to poor people to help them meet the rising energy costs ..	24.0	,,
Tax credit for energy development ..	5.5	,,
Miscellaneous energy measures ..	1.2	,,
Total ..	$142.2	billion

Where will this colossal sum of money come from ? The Energy Security Corporation would raise $5 billion from the public as "seed money" by selling small-denomination bonds to give Americans a sense of participation in the historic struggle to overcome the energy crisis. For the rest Mr Carter would rely on what he called a "windfall profits tax" to be levied on the oil companies whose profits have been soaring as a result of the OPEC-dictated price hikes.

Here, then, in broad outline is the brave new energy plan that Mr Carter, in a stunning about-turn, served to the Congress and the public. And without letting grass grow under his feet he plunged into a frantic campaign to drum up broadbased public support for it. What are the chances of his success in this extraordinary undertaking ? As things now stand, they must be rated as slim. For this the fault lies not in his stars, but in his disingenuous approach.

Here is a classic case of much haste, less speed. Because congress, industry, and the public were all left out while hatching the crash programme, it is now about to crash under the combined weight of their criticism. And they have, indeed, plenty of reason to be critical.

Mr Carter has been castigating the oil industry—some say "scapegoating" it—in bitter terms for the nation's energy woes. But the Congress knows, and so does the nation, that the energy programme can succeed only when the genius, the dynamic leadership, and the

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Refractory Section	Kulti, Dist : Burdwan.

anagerial talent of the industry, spurred y adequate profit-earning prospects, are stematically harnessed to it. What uld be more natural for it than to ash the windfall profits tax to one-half less so as to leave enough capital ith the industry to finance increasingly ore costly exploration and development, nd to produce more energy from new urces, including synthetic fuels ?

As seen above, Mr Carter has proposed e creation of a gigantic synthetic fuel dustry with a capacity to produce 2.5 illion barrels a day by the end of the ext decade. This will call for the cons- uction of some twenty huge plants, though not a single synfuel plant has een built, nor the technology, though well known, has been actually tried out in practice in this country. Haste, in such conditions, is bound to make waste.

Not only that; it will bring in its wake new risks on a staggering scale—risks of damaging the environment with vastly expanded stripmining of coal, enormous drain on the limited supplies of water now used for agriculture in some key states, the mountains of tar-sand and oil-shale rejects once the juice has been squeezed out of them; and risks of injuring national health by releasing cancer-causing elements on an extensive scale both in the air and in the water. The Carter plan takes no cognizance of these dangers. But the congress and the public cannot connive at them. The law-makers are bound to insist on a go-slow policy with the synfuel project.

Can Mr Carter ride to his re-election next year on the crest of the energy crisis, as he is desperately trying to do ? He might well have done so had he been willing to attack it head-on with the right strategy, that is, with immediate decontrol of oil and gas making a clean sweep of the maze of price controls and oil and gasoline allocations; far greater accent on energy conservation backed by a whole set of attractive fiscal incentives; and stepped-up stimulus to boost energy output, including synfuels on a reasonable scale. But Mr Carter has clearly fumbled a rare opportunity. And soon it will be too late for him to recapture it.

Social audit and resource management

Prof. Sripati Ranganadha

The author, who is professor and head of the department of Business Administration, Annamalai University, says that while Gandhiji's trusteeship concept has been adopted and put into practice in many industrially advanced nations, the idea has not taken roots in our country. He enumerates the benefits of social audit which gives an analysis of what an employee contributes to the success of an organisation as well as the contribution that the organisation makes to the society.

OCIAL AUDIT represents the area of appli- ation for societal resource management hich has been neglected in the past. ome major breakthrough in the approach o social audit has of late been highlight- d. Social audit concentrates not only on he development of all employees but also ays high premium to the value of emp- oyees in terms of the contribution they ake to the success of an organisation s well as the contribution of the organi- ation to the society. Thus social audit ndeavours to control the human assets hich are to a great extent responsible or the survival and growth of an organi- ation.

A distinction is drawn between social udit and morale survey. The former em- hasises the cooperation of the perfor- nance of a company by trained personnel rom the social point of view. The latter s concerned with the workers who as ndividuals exert in their own right rather han as part and parcel of the organisation. The social audit evaluation provides 'a combination of interviewing and exchanging information designed not only to obtain insight but also to meet people as people rather than as guinea pigs.'[1]

Of late, social audit focuses its attention on social performance, social involvement and social responsibility of the activities of a company. Corporate citizenship, the enlightened concept, is finding expression in the business today. Enterprises can hardly survive without social consciousness. Social audit is defined as 'a commitment to systematic assessment of and reporting on some meaningful domain of company's activities that have social impact.'[2]

In a welfare state, the purpose of business is to serve the needs of people. As such, it is natural that social involvement and social responsibility rest on business. The social activities of business have to be changed and altered if necessary in view of changing expectations of the people.

To study, review and evaluate the performance of an organisation, social audit is called for. It is a device bywhich enterprises make the people realise that they can make a significant imfact on social well-being. Social performance is concerned with organisational activities which are generally associated with the overall welfare of the society. To this end, the share holders and the management have to assume social responsibility in the way of establishing educational institutions, play grounds, parks, nursery schools, health centres and the like for the community. National interests which include family planning, donations to charitable and social institutions and such other socio-economic-financial beneficiaries have also to be highlighted.

Social audit appraises the post-mortem analysis of social performance of an organisation rather than the amount of benefit that tends to offer to the society. How much a corporation, for example, contributes to the community is not that important but how much the net social income that the corporation has set apart for the society is all the more significant. Humanitarian ideals seem to conflict with economic consideration and efficient operation. Social involvement can hardly be assessed in monetary value.

Social audit attempts to evaluate the process of social effort that is put in rather than the concrete results. Incidentally social performance differs from managerial performance where the latter rests on the contribution to economic results.[3]

Cost benefit analysis are concerned with quantitative calculation of economic consideration and do not probe into social values involved.

The appraisal of social performance need not result in cost benefit. What would be the benefit, for instance, that could be provided to the community of starting a school to a tribal area? This cannot be quantified and much less revealed in the books of accounts which set forth costs of the benefit but not benefit as such. As we are aware, the costs and benefits are not one and the same. In a macro-economic analysis, one can realise the benefits accrued to the tribal community of setting up a school in the long run. When social action pays off it is likely to derive benefits only over the years.

subjective benefits

Social audit is associated with social costs which also intend to reflect benefit to the society and are more subjective by nature. The auditor has to pass judgment on the basis of accounting data provided in the books of accounts. Faulty conclusions may crop in on a decision and action taken by an executive who may not have supporting economic appraisal of accounting data for an auditor to verify and certify.[4]

In view of the limitations set in the books of accounts, it is but proper to rely on cost audit which aims at the social benefits accruing to the community. Thus social audit is a part of cost audit. Though cost audit is subjective, its emphasis is on the performance and proprietary nature and functioning of an outfit.

Social audit strives to examine whether the outfit employs the committed resources effectively for optimum utilisation and benefit to the community. Thus social audit assumes the role of performance audit as well as efficiency audit.[5]

Social audit can be undertaken either by an internal specialist of an organisation or by an external consultant. The former is associated with the organisation and may be biased on his assessment, while the latter may not be fully familiar with the activities of the organisation. As such he is likely to overlook certain significant plus points. Therefore, it is advisable to have a combination of the two which tend to work out better. Bowen observes that social auditors should be oriented toward the social point of view, conversent with business practices and problems and technically trained in such fields as law, economics, sociology, personnel, government, philosophy and theology.[6]

Social audit employs both qualitative and quantitative data. The latter is essential in the sense that it is precise and convincing. A firm subject to social audit has to consider certain preliminary procedures. It has to itemise initially all its activities having potential social impact. Second the firm has to explain under what circumstances these activities have been undertaken. Third, these activities are subject to some evaluation programme. Finally, observations have to be made whether the goals of the firm are related to the needs of the public.[7] These steps will help the social audit to evaluate the socially oriented actions or activities of the said firm.

In the main social audit helps to assess how well its corporation is living up to its objectives, makes comparisons with others and determines 'how fast it is moving towards its social objectives over a period of time'.

The concept of Gandhiji's trusteeship has been adopted and put into practice in many industrially advanced countries which seem to equate social responsibility with enlightened self interest. It is indeed unfortunate that in our country which has been advocating trusteeship for years this concept has not taken deep roots and continues to pay premium to profit pursuing.

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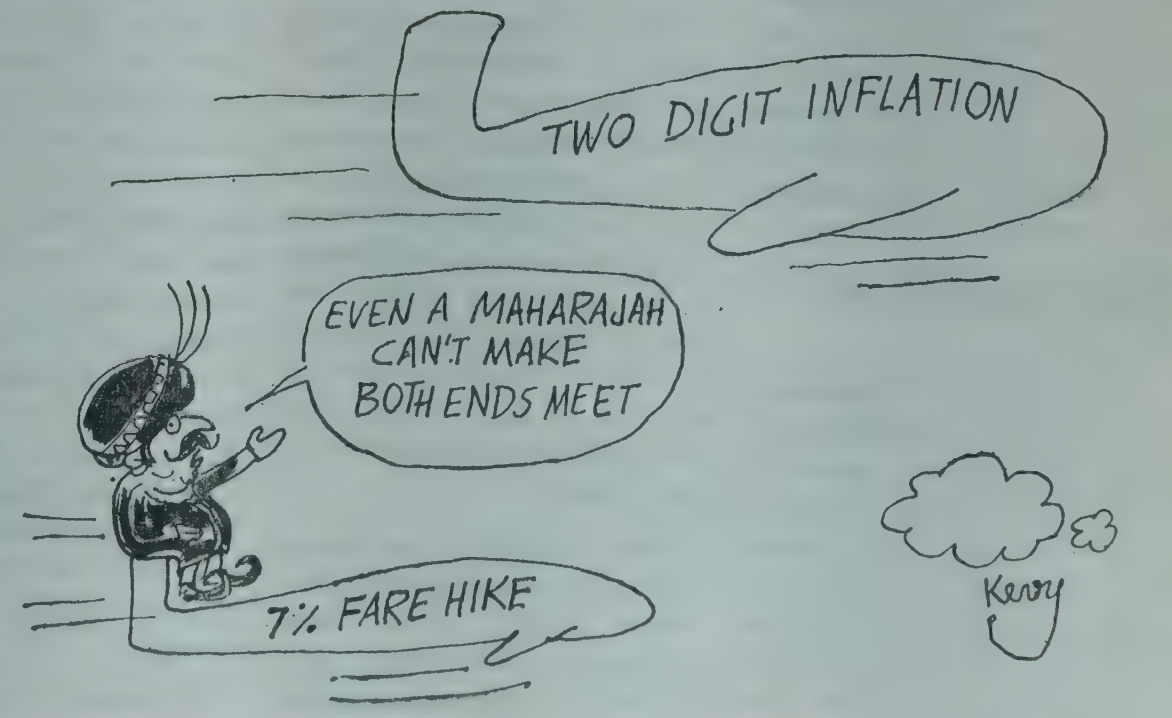
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TRADE WINDS

)rdinance on Bonus

HE PRESIDENT, Mr Neelam
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ouble-Rupee Rate

The government on August
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orld Seminar on tato

ndia hosted an internatio-
symposium on post-harvest
nology and utilisation of
ato. The four-day symposi-
was held at the Central
ato Research Institute at
la on August 30. Scientists
n 12 countries and 150
ian delegates attended the
symposium, which the Indian Council of Agricultural Research (ICAR) had jointly sponsored with the International Potato Centre, Lima, Peru.

The symposium covered a wide range of topics: harvesting, handling and grading, training and extension, storage and seed production technology, linkages between International Potato Centre and developing countries, processing, utilisation, nutrition, socio-economic constraints and marketing. Dr M.S. Swaminathan, secretary in the department of Agriculture and Rural Development, delivered the valedictory address at the plenary session. Other Indian participants included Dr O.P. Gautam, director-general of ICAR and Dr B.B. Nagaich, director of the Central Potato Research Institute.

Plantation Schemes

The government has approved two new schemes as part of its plan to increase areas under different plantations, particularly in non-traditional areas through subsidy. The schemes relate to rubber and coffee. In order to encourage cultivation in new areas, it has been decided to grant cash subsidy for both the plantations in view of the long legislation periods which in the case of coffee is four years and for rubber it is seven years.

With a view to enthusing people to take up rubber plantations afresh, it has been decided to offer a cash subsidy of Rs 7,500 per hectare for holdings up to two hectares and for holdings between two hectares and 20.23 hectares, it will be Rs 5,000. It has also been decided to pay to the growers an interest subsidy up to three per cent. Field officers of the Rubber Board will be appropriately strengthened to take up this task.

The plan to increase production of natural rubber assumes special significance in view of the growing gap between demand and supply. The total expenditure under the scheme now approved for new plantations during 1979-80 and 1982-83 would be a little over Rs 33 crores.

Under the scheme for coffee, 25,600 hectares will be brought under new cultivation from 1979-80 to 1982-83. In this, case a subsidy of Rs 2,500 per hectare will be paid. The total cost in 1982-83 will be slightly over Rs 4 crores.

Company Secretaries World Meet

A delegation of the Institute of Company Secretaries of India, consisting of 50 company secretaries left recently for Hong Kong, to participate in the international convention of company secretaries, organised by the Chartered Institute of Secretaries and Administrators, London. This delegation left under the leadership of Mr C.R. Shah, president of the institute. The subjects to be discussed at the convention are—industrial democracy, company and central government, corporate finance and communications. The convention will be inaugurated by the governor of Hong Kong and the farewell address will be delivered by the Hon'ble Chief Justice of Hong Kong.

Delegates to the convention will be from 25 Commenwealth countries viz, Australia, Canada, Bangladesh, India, Italy, Nigeria, Sri Lanka, United Kingdom and Hong Kong, etc.

UNCTAD Jute Meet

The jute producing countries met in Bangkok recently to explose various aspects connected with an international agreement on jute exports. The meeting which was convened by UNCTAD in collaboration with ESCAP was held from September 3 to 5. Mr B.L. Das, joint secretary in the Commerce ministry, and Mr S.K. Sarkar, joint secretary in the ministry of Industry, went to Bangkok to take part in the discussions.

The main purpose of the meeting. was to discuss various aspects from producers' angle regarding the possibility of arriving at an international agreement and also what the producing countries can themselves do towards cooperation among themselves so as to ensure remunerative prices both for raw jute and its products. Apart from India and Bangladesh, the two major producing and exporting countries so far as jute is concerned, the meeting was attended by representatives of other Jute producing countries Nepal, Thailand and Burma.

Madhya Pradesh Plan for Drought-prone Area

The state government of Madhya Pradesh has formulated schemes worth Rs 7.40 crores for the drought-prone areas in the districts of Jhabua, Dhar, Betul, Sidhi, Khargone and Shahdol. The schemes have been forwarded to the central government for approval and would be executed during the current financial year, according to the official sources. A sum of Rs 1.40 crores has been earmarked for expenditure in the drought-prone areas of Betul district. Of this, Rs 41.42 lakhs would be spent on small irrigation works, Rs 13 lakhs on medium irrigation works, Rs 6.32 crores on agriculture, Rs 57.19 lakhs on veterinary and animal husbandry, Rs 4.21 lakhs on fisheries, Rs 17.75 lakhs on forest development schemes. As much as Rs 75,000 have been set apart for promotion of cooperative institutions.

A total of Rs 24.21 lakhs has already been spent in drought-prone areas of the district during 1978-79. Betul, Chicholi, Shahpura, Ghodadongri, Multai, Probhatpattam, Amala and Bhimpur development blocks are covered by the drought-prone area programme.

IMF Assistance

The International Monetary Fund IMF announced recently that it has distributed $ 396 million to 104 poor countries from profits it has made by the sale of gold. India was the biggest beneficiary, receiving $ 45,888,680 it was followed by Argentina and Brazil, each of which got $ 21,475,560. Mexico received $ 18,067,420, Venezuela $ 16,113,800 and Indonesia $ 12,691,000.

Distributions are made in proportion to each country's quota in the fund, a figure based on the size of its economy and its foreign trade, among other elements. Two previous distributions of profits from gold sales totalled $ 363 million and a fourth is due to be made next July. Distributions of this kind account for just under 28 per cent of the profits from the sales. The rest—about $ 2.1 billion—has gone into a "trust fund" from which loans are made on easy terms.

The loans, however, are only made to countries where the average citizen makes $ 530 a year or less, and where the government promises to tighten up its economy so as to try and solve its international trade problem—the perennial problem of poor countries which buy too much abroad and fail to sell enough.

Koel Karo Hydel Project

The government has decided to takeover the execution of Rs 250-crore Koel Karo hydel power project in Bihar. The National Hydroelectric Power Corporation is being asked to implement the project. After prolonged discussions, the Bihar government agreed recently to handover the project to the centre for implementation.

The project is likely to be financed from the Saudi Arabia fund for development, offered earlier. A team of government officials, including Mr P.M. Beliappa, joint secretary, ministry of Energy will be visiting Saudi Arabia to negotiate the loan. The team will include representatives of the National Hydroelectric Power Corporation, the department of Economic Affairs and the Bihar government.

Investment Climate in India

India's ranking in the world investment market came down in the second quarter of 1979, with an international standing panel giving it the 41st place in a list of 45. India's placement in the people's survey for the first quarter of this year was 39th according to a panel document. The panel, which regularly undertakes surveys on the investment climate of the 45 most industrialised countries outside the eastern block, accorded India 37.3 points in the second quarter out of a possible 100 points against 41.6 in the first.

The panel judges the investment climate in each country by weighing 15 criteria such as political stability, attitude toward foreign investment, economic growth, policy towards nationalisation, bureaucratic delays, communication and transport, and credit facilities. According to the survey, companies which intend to invest abroad put West Germany, with a rating of 83.1 points, at the top. Pakistan, which had occupied the last place in the first quarter, was replaced by Iran, with a ranking of 27.3 points.

Handicraft Exports

Handloom and handicraft products including carpets worth about Rs 900 crores were exported to different parts of the world during, last year, according to Mr S.B. Mathur, deputy director of the export council of the Indian Handicrafts Board. Mr Mathur, who was on a 3-day

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OUR UNITS :

1. **Bharat Commerce & Industries Ltd. P.O. Birlagram, Nagda (M.P.)**
2. **Kiran Spinning Mills, Kolshet Road, Thane (Maharashtra)**
3. **Bharat Commerce & Industries Ltd. Rajpura (Punjab)**
4. **Sujata Textile Mills, Nanjangud (Karnataka)**

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Surya Kiran, 5th Floor,
19, Kasturba Gandhi Marg,
New Delhi 110 001

inspection and survey tour of the brassware centres of Varanasi and Mirzapur stated that the demand for brassware articles was rising in foreign countries. It was the constant endeavour of the board to raise its export from Rs 40 crores to Rs 100 crores, he said. The administrative office of the board is being set up in Varanasi to boost the manufacture of these articles, he added.

New Products from Metal Box

Metal Box India Ltd has entered the market with a new product — anti-friction bearings. The company plans to manufacture bearings for a variety of user industries, including commercial vehicles, cars and jeeps, tractors, scooters and motor-cycles, electrical motors, fans, diesel engines, pumps, fuel injection equipment, railways and animal-drawn vehicles. The company's new plant at Kharagpur (West Bengal), which has gone into production has been erected, installed and commissioned by its engineers in a record time of 10 months. This has been made possible by a comprehensive transfer of technology from the technical collaborators; Societe Nouvelle de Roulements (SNR) or France, a subsidiary of Renault group.

The current installed capacity is 5.4 million bearings per annum, which will make it the third largest bearings manufacturer in India.

Fish Seed Plan

The World Bank has cleared the Rs 5 crore massive fish seed production project for the Chhattisgarh region. Work under the programme has already started in one of the five farms—Khutelabhata, six kilometres from Bhilai. The World Bank has selected Bengal, Bihar, Madhya Pradesh, Orissa and Uttar Pradesh for the fish seed production. In Madhya Pradesh, Raipur Durg, Rajnandgaon and Bilaspur districts have been selected.

The bank team, which visited the region thrice was convinced that Chhattisgarh having a big water area was best suited to the project. It also felt that 90 per cent of fish seed requirements were met by imports and fishery was not very economic. The bank's programme aims at making it an economic proposition for thousands of fish farmers. Madhya Pradesh government have already handed over the 20 hectares to Khutelabhata fish seed production farm—having 14 hectares of water area—for the programme. The programme is being executed by the Madhya Pradesh Fishery Development Corporation.

Automatic Computer Controlled System

Kobe Steel, Ltd of Japan announced that Brazilian National Steel Co (CSN) has awarded Kobe Steel an approximately Y 200 million contract to instal a unique Fully Automatic Computer Controlled System (FACCS) for CSN's No. 4 air separation (oxygen generating) plant supplied by Kobe Steel. This is the first supply of the system to an outside client. Developed by Kobe Steel in 1976, FACCS adjusts automatically the operation to achieve the optimum running conditions for given product such as oxygen or nitrogen, with resultant considerable savings of power consumption and manpower. In a conventionally controlled plant, it is rather difficult even for a number of skilled operators to adjust the operation to meet fluctuations in demand for product.

LIC Concessions for Flood-hit Areas

The Life Insurance Corporation of India has announced several concessions to policyholders residing in the flood-affected areas of Gujarat and Maharashtra. Some of the important concessions announced are : (1) In the event of death of the assured during this period, the claim will be met in full subject to deduction of unpaid premium and subject to certain conditions. (2) If there is no regular proof of death available, the certificate of the Collector or the District Magistrate may be accepted. (3) Policyholders will be issued duplicate policies, free of cost, by LIC on the strength of an indemnity bond in case of original policies being lost in the floods. (4) Late fee or interest on premiums paid late will be condoned upto a period of three months reckoning from the due date of the premiums. (5) Age proof upto sum assured of Rs 25,000 may be waived in case of maturity and death claims.

Besides, rules regarding payment of surrender value and claim investigations have also been liberalised subject to certain conditions. These concessions will be in force for a period of three months from the date on which the state government by a gazette notification has declared these specific areas to be flood affected. The concessions will also apply in the case of policies which are in force for full sum assured on the date on which the state government declared these specific areas as flood hit and will

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be applicable to policy-holders residing in such notified areas.

Sale of Old Ships

The Shipping Corporation of India (SCI) will sell 22 ships within the next two years. The ships which are more than 20 years old, may be sold either in running condition or as scrap, depending on the market conditions. No estimate could be made about the revenue they will fetch. The SCI vice-chairman and managing director, Rear-Admiral Krishan Dev, indicated recently that it became necessary to replace the old ships in view of the changing nature of India's foreign trade. The trade of the 80s could not be serviced with ships meant for the 60s, he added.

The corporation will purchase 22 new ships to serve in place of the ships being scrapped now. In accordance with the government policy, SCI is going in for semi-containerised ships and the delivery of one of the new ships will be made later this year. Of the 22 new vessels, 19 are built in foreign ship-building yards and three at the Hindustan Shipyards, Cochin.

Import of Diesel Generating Sets

In order to tide over the current power shortage obtained in many textile centres, the Indian Cotton Mills Federation (ICMF) has urged the Ministry of Industry to allow import of diesel generating sets free of import duty. At a time when there is urgent need to counter inflation through all-out efforts to maintain the tempo of production. The inadequacy of power supply is causing considerable concern to the industry. Pending the resolution of the power crisis through long-term measures for additional power generation, the mills will perforce be required to depend on diesel generating sets to supplement their electricity needs.

The working of cotton textile mills has been hampered, for quite some time now, by frequent load-shedding and severe power cuts. The difficulties of mills in West Bengal and Maharashtra are quite well known.

Names in the News

Mr H.J. Watson has taken over as chief manager (chief executive officer) of the Chartered Bank's India operations. He was formerly an executive director of Standard Bank (Ghana) Ltd and subsequently managing director of Standard Bank (Nigeria) Ltd.

THE DELHI CLOTH & GENERAL MILLS CO. LTD.

NOTICE

It is hereby notified for the information of the public that The Delhi Cloth & General Mills Co. Ltd. proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for the establishment of a new manufacturing activity for the production for internal consumption of foundry resins (total capacity—750 tonnes).

1. Name of the proposed undertaking. : Tha proposed manufacturing activity will be undertaken by The Delhi Cloth & General Mills Co. Ltd.

2. Names of persons or authority/authorities proposing to establish the new undertaking. : The Delhi Cloth & General Mills Co. Ltd. will be the proprietors of the proposed manufacturing activity and is managed by Managing Directors.

   Where it is a body corporate, furnish details of its management structure together with those of the proposed undertaking.

3. Capital structure of the applicant/person or authority and of the proposed undertaking. :

	(Rs. in crores) Applicant
Authorised	50.00
Issued, subscribed and paid up :	
Preference	2.17
Equity	17.40

4. Proposed location of the new undertaking. In the existing premises of the foundry unit located at Village Asron, Ropar (Punjab)

5. Brief outline of the cost of the project, the scheme and source of finance. The estimated capital outlay is Rs. 50.00 lacs, which is proposed to be financed by Company's own internal resources.

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

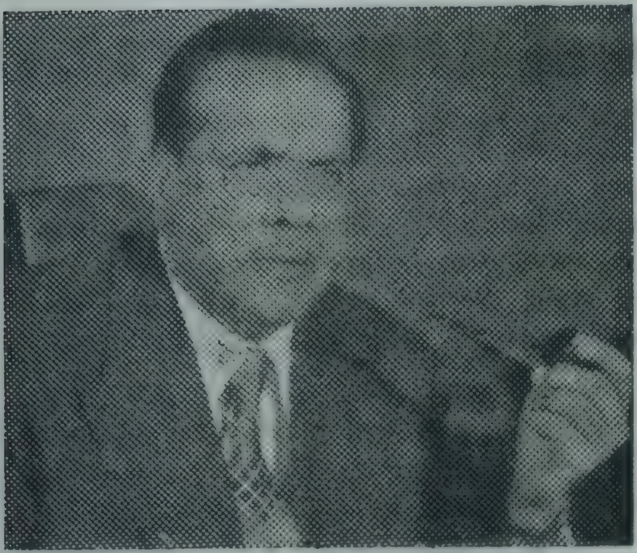
Sd/-
EXECUTIVE DIRECTOR

Regd. Office : Bara Hindu Rao,
Delhi-110 006
Dated, this day 28th August, 1979.

MODIPON LIMITED

MODINAGAR (U.P.)

Speech of the Chairman, Shri K. N. MODI



SHRI K. N. MODI

Following is the Speech of the Chairman, Shri K. N. Modi at the Fourteenth Annual General Meeting of the Company held on August 31, 1979.

HIGHLIGHTS

1. Country is facing serious inflation which should be contained through increase in production and reducing the prices of basic inputs to pre-budget level. Customs duties on imported industrial inputs should be abolished to bring down their prices.
2. Capacities of polyester/staple fibre, polyester filament yarn and nylon yarn should be expanded in view of a big gap between demand and approved capacities. Licences should be given to those firms whose over-all capacity is lower to make them viable.
3. In order to bring man-made fibres within easy reach of common man excise duties at various stages should be re-structured and on same value fabrics of different fibres rate of duty should be same.
4. Diversification should be permitted to all industries and nylon producers who are not producing tyre cords, carpets, and other industrial yarns should be permitted to do so.
5. Coal shortage should be removed by improving management of mines and railways. Government should not hesitate to take expertise from private sector and some new mines may be given to it for operation.
6. Shortages of power should be over-come through better utilisation of thermal capacity by proper maintenance, better management, timely repairs and proper accountability. Even if capacity utilisation is improved by 5 to 7 percent which is easily possible to be achieved—shortages will be eliminated to a large extent and financial position of electricity boards will improve.
7. Adequate credit should be available for increasing production. The ceiling fixed recently should not be to those who want to produce more—otherwise shortages will develop.
8. In order to encourage new investment debt-equity ratio should be liberalised and import duty on machinery **should be reduced to bring down** project costs.
9. Convertibility clause is a big damper on new investment. It should be waived if banks and financial institutions are already holding one-third of equity capital in any undertaking.

Friends,

It gives me great pleasure to cordially welcome you all to the Fourteenth Annual General Meeting of your Company. It is our great privilege that Mr. Donald F. Murphy, former Vice President of Rohm and Hass Company is with us. He had been instrumental in the establishment of the International Division in Rohm and Haas and ventured to invest in our Company at a time when many Americans were shy to invest in India. Through his efforts, guidance and advice your Company could reach to-day's position. I am very happy to welcome him to the meeting and thank him for the trouble he has taken to be with us even after his retirement which shows his continued interest in the welfare of the Company.

The directors report, audited Balance Sheet and Profit and Loss Account for the year ended 28th February 1979 have been in your hands for quite some time and, with your permission, I take them as read.

Working Results :

The progress of the Company has been dealt in the Directors' Report and therefore, I shall not dwell at length on this aspect. As you would have noticed from the Annual Report, during the year ended 28th February, 1979 the profit of the Company declined from Rs. 5.44 crores in the preceding year to Rs. 4.04 crores during the year under review, in spite of the increase in production by about 6 per cent. This is largely because of keener competition, liberal imports of nylon under OGL and the hike in excise duty which increased the burden from Rs. 17.76 crores to Rs. 20.14 crores

Inflation—Major Problem :

To-day on economic front inflation is number one problem which India is facing.

During the last six months, the prices rose by about 17 per cent. Urgent and quick steps are necessary to contain inflation. This year in some parts of India the monsoon has failed which may result in lower food production. If we don't make up this loss by increasing industrial production, prices may further shoot up. However, the performance of industry is also not very encouraging, because there is great shortage of many industrial inputs, like coal, power and transport and the prices of others have gone up very high.

In our country many of the raw materials are controlled by the public sector such as electricity, coal, steel, railway freight, petroleum and basic petroleum products. Of late there has been a spurt in prices of these items. With inflation in the prices of basic raw materials, the prices of manufactured goods are likely to rise in coming months until and unless **the inputs prices are brought back to the last year level and adjusted at the last year cost of raw materials**. Your Company is also facing great increase in the prices of its raw materials like caprolactum and D.M.T. The increase in prices is much more than warranted by increase in the prices of other petroleum products consumed in the manufacture of these items. **In order to bring down prices of final products it is essential to reduce prices of inputs..**

Industrial raw materials which are imported, **customs duties should be abolished** to contain inflation and to keep a check on Indian prices.

Increase Capacities of Man-made Fibres :

Shortages are experienced in a number of products because adequate targets have not been fixed in the Sixth Plan. Amongst these man-made fibre is important. The Sixth Five Year Plan targets for polyester staple fibre, polyester filament yarn and nylon yarn are much less than what the demand justifies. Their popularity is increasing day by day and the gap between demand and supplies is increasing. **As the gestation period is three to five years additional capacities for all man-made fibres should be sanctioned immediately to avoid shortages. While issuing fresh licences Government should see over-all capacity of all products of man-made fibres produced by a Company, additional capacity should be allocated to firms whose over-all capacity is lower than others to improve their economic viability.**

Make Man-made Fibre Common Man Fibre—Re-structure Excise Duties :

In our country prices of man-made fabrics are much higher than cotton and they are beyond the reach of the majority of people because of excise duties at various stages—raw materials, fibres, yarn and fabrics—and that too at prohibitive rates. We have adopted multi-fibre policy and consumer has shown preference for man-made textiles, but due to heavy rate of duty on synthetics many times more than on cotton and woollen fabrics they are beyond the reach of common man. **These should not be considered luxury and duty structure ad valorem should be at par on fabrics of different fibres.** With lower prices, following duty cuts, they would be used by the common man. For instance, in case of nylon yarn produced by your Company the incidence of duty works out to 51 per cent of gross sales realisation. With duties on later stages on crimping, knitting and weaving major content in final consumer price is that of excise duties. The whole duty structure requires re-thinking in a way it is beneficial to consumers.

Allow Diversification :

In order that the industries may be in a position to have optimum use of men, machinery and materials and the need for further investment is minimised, all industries should be encouraged to diversify in allied lines specially if they can do so without much investment and without import of machines. For such diversification no licence should be required so that production may be maximised in the shortest possible time with least investment. For instance, **the nylon manufacturers who are not producing tyre cord, carpet and other industrial yarns, should be permitted to do so without requiring fresh licence and where licences are needed they should be given to parties who are not producing these items.**

Remove Shortage of Coal and Power :

The biggest constraint in the way of increasing production in the existing industries is deficiency of coal and power, both in quantity and quality. Industries are experiencing shortage of coal and whatever coal they get is sub-standard, containing lot of un-wanted materials. Industry has to pay the price for this waste and also bear transport cost on it. Road transport has become very expensive and the cost of coal moved by road goes above Rs 400/- per tonne as against Rs 225/- per tonne of coal moved by rail. **To increase supplies of coal, management should be improved. Government should not hesitate to take expertise from the private sector to improve management of existing mines and some new mines may be given to private sector for operation.** Railway movement should be so streamlined as not to force the industry to move coal by road.

Industries in various States have been experiencing heavy power cuts which is hampering production. If there is an improvement of only five to seven per cent in the efficiency of the thermal power stations—which is easily possible to achieve—the present power shortage can be substantially removed. All this requires **better management, timely repairs and maintenance and proper accountability.**

There is also continuous increase in power rates without any consideration of its impact on general price level. When **there is immense scope for improving the financial position of electricity boards through check on line losses and better utilisation of capacities, the easy course of raising rates should be avoided.**

Credit Restrictions :

Reserve Bank of India, a few days back imposed new restrictions on credit limit to 80 per cent of actual utilisation during the two years period ended June, 1979. This constraint will create severe problem to industry and will be counter productive and inflationary. While mis-use of funds for speculative purposes or hoarding must be controlled, **adequate credit should be available for production and maintaining reasonable inventory.** Even after June, 1979 with the rise in input prices, credit requirement of the industry have gone up. Therefore, **the ceiling if at all fixed should be on the basis of loans availed of till Aug. '79 and banks should be permitted to relax in genuine cases not only upto 10 per cent of the indicated level but upto the previous utilisation.** Further, if somebody increases production, additional credit should be available.

New Investment:

In order to avoid shortages in the long run, it is necessary that new investment activity, which is very slack, is stimulated immediately through proper banking and financial policies and giving industrial licences to the parties who can deliver the goods. Industries requiring heavy investment should be allowed **more liberal debt equity ratio, import duty on machinery should be reduced to bring down project costs** and following aspect should be considered on a priority basis.

Convertibility :

The convertibility clause introduced by the financial institutions is a great damper on the new investment, whether expansion or establishment of new projects. If the financial institutions and commercial banks together decide not to hold more than one-third of the shares of any company either by way of conversion of loan into equity, subscription to shares or purchase in the market, the uncertainty can be greatly over-come. This will help boost investment. **If in any company these institutions are already holding one-third of the equity, further convertibility should be waived so that promoters** may have control on management and may not have the fear of its being watered down with every subsequent borrowing.

New Project of Soyabean :

The Company had been granted letter of intent for the manufacture of soyabean products. Effective steps are being taken to implement it and locate it in Madhya Pradesh. It is proposed to form a new Company.

Rural Development :

Your Company has been conscious of its social obligation and has undertaken development of villages around Modinagar. It has been providing assistance for constructing and improving drainage, roads and has created educational and other facilities. Encouragement is also provided for development of rural handicrafts to enable the rural population to increase their income. As a result of the experience gained in the last two years, the programme is further intensified.

Acknowledgements :

The Company is thankful to the workers, staff and Officers at all levels for harmonious relations and for hard and devoted work for imrpoving production and productivity of the Company and hope that in the coming years sustained hard work will continue which is the need of the hour to increase production.

I would also like to thank my colleagues on the Board of Directors for valuable assistance and advice given from time to time and the commercial banks and financial institutions for their continuous guidance, support and co-operation.

(*This does not purport to be a record of the proceedings of the Annual General Meeting*).

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JANATA PARTY

SARDAR PATEL BHAWAN, 7, JANTAR MANTAR ROAD,
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An Appeal to People

Shri Sanjiva Reddy has dealt a cruel blow to India's democracy. He flouted democratic conventions and his own earlier judgement when he did not invite Shri Jagjivan Ram, who led the largest single majority party (203) in the Lok Sabha, to form an alternative Government after the fall of the Charan Singh Ministry.

This is an insult and a challenge to the people and their representatives whom they had voted to Lok Sabha. We take up the challenge, and come back to the people.

We salute the millions of men and women of India, who trusted the Janata Party and put it in power. The party was faced with many tasks: removal of wrongs, upholding of human rights and freedoms, restoration of democratic rule, a new direction to economic policy especially in favour of the poorer and the lowly, and revival of faith in constitutional remedies and the rule of law. Much had been attempted, and much remained to be done.

Meanwhile, betrayal of the party's pledge to the people, blatant opportunism and wild lust for power by individuals brought about the fall of the Janata Government and transformed the party into a party of Opposition. This has been a breach of faith of the people. Therefore, the battle of the Janata Party is not over.

And Shri Sanjiva Reddy's action in dissolving the Lok Sabha is an affront to the people.

The party's election campaign has begun. The party intends to inform the people on what its Government at the Centre and its Governments in the States did to carry out the people's mandate. The party is launching an intensive campaign to inform the people on its policies, achievements and the programmes ahead. The party's election manifesto will be with the public very soon.

The information/publicity programme, which we consider important, would need resources in an adequate measure. We turn to the people and rely on their faith in human dignity and the democratic system to help the party in the effort. The people are our strength; even your smallest contribution would be of value to us in the fight against dictatorial trends and for democracy.

Therefore, we appeal to the party workers, individual citizens, institutions, organisations and the people at large to help the party with generous donations. All donations may be sent to the Janata Pary, 7, Jantar Mantar Road, New Delhi-110001, through crossed cheques, drafts or money-orders.

Jagjivan Ram Chandra Shekhar

JAGJIVAN RAM **CHANDRA SHEKHAR**

August 23, 1979

COMPANY AFFAIRS

Gujarat Alkalies and Chemicals

THE SIXTH annual report of Gujarat Alkalies and Chemicals Limited, for the year ended 1978-79, indicates that the company is making good progress towards operational and functional viability. In the second full year of production after the plant was commissioned in October 1976, it has achieved outputs in excess of its licensed capacities for various products. The production of caustic soda, for instance, has been "in excess by 11 per cent and this has served to mitigate the severe shortage of this important chemical which the country is experiencing. So much for the perverse propaganda of some politicians against companies producing in excess of their licensed capacities. Meanwhile thanks to its dynamic and forward-looking policies of maximising production, Gujarat Alkalies and Chemicals now stands first amongst caustic-chlorine units in the whole country in respect of full utilization of installed capacity. It is now the largest single seller of hydrochloric acid in the country and has also exported good quantity of this chemical to the middle-east countries which are expected to provide a growing market for this product in the coming years.

The company's sales reached a level of Rs 10.31 crores in 1978-79 representing an increase of 17 per cent over sales of Rs 5.79 crores in the preceding year. The factors contributing to this gain are said to be higher production, higher prices for products and full effective disposal of liquid chlorine. The gross profit of Rs 2.33 crores stands reduced to a net profit of rupees one crore after allowing for depreciation and taxation as compared with the book loss of Rs 1.12 crores in the preceding year. The net profit has helped to bring down the accumulated loss to Rs 2.20 crores.

The company is taking steps to implement projects for the manufacture of sodium cyanide and cyanuric chloride products. Meanwhile it has decided to expand its existing caustic soda/chlorine plant. The scheme is expected to be completed by 1980 and it is designed to increase licensed capacity from the existing level of 37,425 MT of caustic soda per annum to 70,425 MT per annum. The company proposes to execute these projects without any increase in the share capital, consequently, existing shareholders will be exclusively eligible for the benefits that may accrue to the company's earnings as a result of these expansion and diversification plans.

Bajaj Auto

The directors of Bajaj Auto have proposed to maintain the dividend at 18 per cent for the year ended June 30, 1979. The company has suffered a mild setback on account of intermittent strikes and lay-off of workmen as a result of power cut and suspension of working from June 26 last.

According to preliminary figures the turnover has declined from Rs 58.88 crores to Rs 53.09 crores and the gross profit is down from Rs 12.60 crores to Rs 11.39 crores in the previous year. After making provisions for depreciation of Rs 2.09 crores (Rs 1.78 crores), investment allowance of Rs 49.61 lakhs (Rs 41 lakhs) and taxation of Rs 5.02 crores (Rs 6.56 crores), the net profit is Rs 3.78 crores compared to the previous year's Rs 3.85 crores.

Out of the profit, the recommended dividend will absorb Rs 84.62 lakhs (same). After certain adjustments, Rs 2.99 crores (Rs 3.16 crores) is credited to the general reserve. The company has received a letter of intent for doubling the capacity of two-wheelers to 160,000 numbers. This is in addition to the capacity sanctioned for producing 30,000 scooter CKD packs for supply to Maharashtra Scooters and for 18,750 three-wheelers.

Mayfair Leather

Mayfair Leather Industries proposes to enter the capital market shortly with a public issue of 288,000 equity shares of Rs 10 each at par. The proceeds of the issue will be utilised to meet a part of the finance for setting up a new footwear and leather garments manufacturing unit at a cost of Rs 1.28 crores.

The company has taken over the industrial unit of Libra Footwears, producing footwears at Badlapur in Thane district of Maharashtra. The total licensed capacity of the company will be 400,000 pair of leather garments and handbags and 600,000 pair of footwear per annum.

The project cost of Rs 1.28 crores is being financed by the share capital of Rs 48 lakhs, term-loans of Rs 42.87 lakhs and working capital loans of Rs 36.67 lakhs.

The company's products will be exported to the US, west European countries and the UK. It has already received export orders worth about one crore rupees.

Jayashree Chemicals

The directors of Jayashree Chemicals have proposed a dividend of 18 per cent for the year ended March 31, 1979, as against 10 per cent paid for the previous year. The register of members and share transfer books of the company will be closed from September 21 to 29, both days inclusive, for purposes of payment of dividend.

Hindustan Brown Boveri

Hindustan Brown Boveri has proposed to maintain dividend at 15 per cent for the year ended April 30, 1979. Preliminary figures show a profit before tax at Rs 2.86 crores as against Rs 3.43 crores despite a higher turnover of Rs 29.93 crores against the previous year's Rs 28.43 crores. After providing Rs 13.45 lakhs (Rs 7.15 lakhs) for investment allowance and Rs 1.29 crores (Rs 1.79 crores) for taxation and after certain adjustments, the net profit works out at Rs 1.47 crores against Rs 1.57 crores previously.

Tata Electric

The Tata Electric Companies 500 MW thermal expansion project at Trombay is progressing on schedule and is targeted for commissioning in

1982-83. The consulting engineers in association with Ebasco Services, as review consultants, have been appointed consultants for design engineering and equipment procurement for the project. The services of Envirosphere, a specialised consulting firm in environmental engineering, have also been arranged to advise on anti-pollution measures.

The project is estimated to cost Rs 180 crores. The formalities in connection with the loan of $105 million (Rs 90 crores) from the International Bank for Reconstruction and Development (IBRD) have been completed. Arrangements with Indian financial institutions and banks for term loans and debentures aggregating Rs 55 crores have also been finalised and the necessary formalities in connection with this are being completed. About Rs 90 crores have already been committed to the procurement of major equipment.

Meanwhile, the existing transmission and distribution system is being adopted to handle the output from the 500 MW generating unit. Twelve high voltage circuit-breakers have been up-rated in the system. Two 60 MVA transformers and 100 MVA of shunt capacitors have been added to meet the increasing consumer load requirements and to improve voltage conditions and reduce transmission and distribution losses. Sophisticated electronic high-speed bus fault protection has been introduced to increase system reliability and security.

Indian Card Clothing

The performance of the Indian Card Clothing Company during the first quarter of 1979-80 is well comparable with that of the corresponding period of last year. The level of the order book also continues to be satisfactory, the directors state in their report for 1978-79.

The company is making every effort to generate a good part of its power requirements, but the heavy cut on power recently imposed may have some effect on the company's operations. The company's sales showed an increase of 11 per cent to Rs 6.63 crores during 1978-79.

Its operation during 1978-79 have resulted in a higher profit after tax of Rs 90.34 lakhs against Rs 84.69 lakhs after providing Rs 9.25 lakhs (Rs 9.05 lakhs) for depreciation and Rs 1.81 crores (Rs 1.67 crore) for taxation and Rs 0.40 lakhs (Rs 0.15 lakh) for investment allowance. The directors have proposed to step up the equity dividend from 24 per cent to 27.5 per cent, which will absorb Rs 59.60 lakhs.

Brooke Bond

The pre-tax profit of Brooke Bond India Limited is substantially higher at Rs 858.78 lakhs for the period from July 2, 1978 to June 30, 1979 against Rs 506.18 lakhs for the previous financial period. This improvement was mainly due to higher sales volume of packet teas and instant coffee in the domestic market; better results from bulk tea export and through higher productivity and economies in operations. A sum of Rs 420 lakh (Rs 194 lakh) has been provided for taxation. After taking into account the sum of Rs 5.50 lakh (Rs 4 lakh) from development rebate reserve no longer required and another sum of Rs 101.77 lakh from other liabilities/provisions made in the past years no longer required, allocations include Rs 36.75 lakh (Rs 60.00 lakh) for investment allowance reserve and Rs 126.87 lakh (Rs 20.34 lakh) for general reserve. Overall income is marginally higher. Total exports were lower at Rs 35.32 crore against Rs 43.56 crore in the previous financial period.

The directors have decided to recommend for the period from July 2, 1978 to June 30, 1979 dividend at the rate of Rs 1.50 a share to be paid out of profits for the above period. However, 828,000 ordinary shares of Rs 10 each offered to the employees and members of the company by Brooke Bond Limited will rank 'pari passu' in all respects with the existing shareholders and will confer on the transfers thereof the right to dividend at the above rate for the financial year ended June 30, 1979. Further, 876,000 ordinary shares of Rs 10 each allotted to the financial institutions will rank 'pari pasu' in all respects with the existing shareholders except that they will be entitled to dividend at the same rate but pro rata for the period from May 4, 1979 to June 30, 1979.

India Photographic Co

India Photographic Company, which has taken over the entire business and undertaking in India of Kodak Limited of UK, is entering the capital market on September 24 with a public issue of 232,500 equity shares of Rs 10 each at a premium of Rs 6 per share. The public sector is being made to achieve Indianisation of the company as required under the Foreign Exchange Regulations Act. After the issue, the shareholding of Kodak Limited of the UK, a wholly-owned subsi-

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23-6976
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diary of Eastman Kodak Company of the USA, will be reduced to 39.5 per cent.

The company will continue trading, marketing and processing operations previously carried on by the Indian branch of Kodak. It will maintain its commercial relation with the Kodak group and will receive adequate technical and managerial support.

The company's sales totalled Rs 6.32 crores and gross profit Rs 86.54 lakhs for the year ended October 31, 1978. Imports accounted for about 75 per cent of the total turnover during 1977-78. The company hopes to achieve a gross profit of Rs 1 crore for the current year to end on October 31, 1979. Its sales during the six months ended April 30, 1979, have amounted to Rs 3.99 crores yielding a gross profit of Rs 51.48 lakhs.

According to the chairman, Dr B. V. Bhoota, the company's earnings would largely depend upon the government's import policy. However, the company's products are in great demand which is growing at a faster rate. The company does not have any immediate diversification programme on hand.

Hindustan Everest Tools

Hindustan Everest Tools propose to embark upon a modernisation programme involving a capital expenditure of Rs 80 lakh. The company has been granted a term loan of Rs 50 lakh to meet a part of the finance for the programme. The balance cost will be met from internal resources. With the implementation of the programme, towards the latter part of the current year, the company's profitability is expected to show a substantial improvement, the directors state in their annual report.

Meanwhile, the company has decided to drop the Jhansi project as the terms and conditions for loans sanctioned by the UP Financial Corporation and PIIC of UP were not found acceptable to the management.

The company's operations during the year ended March 31, 1979, have resulted in a lower gross profit of Rs 23.22 lakh against Rs 30.54 lakh for the previous year. Its sales have been maintained around Rs 3.16 crore. The setback is attributed to go-slow and strike at the plant, increase in costs, a steep rise in power rates and unfavourable foreign exchange rates which affected export earnings. The directors have proposed to maintain the equity dividend at 18 per cent for the year. The board has also proposed to issue three-for-five bonus shares.

Hindustan Sanitaryware

Hindustan Sanitaryware and Industries has fared well with the pre-tax profit for the year ending March 1979 amounting to Rs 1.23 crores against Rs 95.37 lakhs in the previous year.

Provisions are: Rs 26.33 lakhs (Rs 14 81 lakhs) for depreciation, Rs 73 lakhs (Rs 54 lakhs) for taxation and Rs 38.44 lakhs (Rs 30.68 lakhs) for general reserve. The profit available for appropriation amounts to Rs 53.21 lakhs (Rs 97.68 lakhs) after taking into account the sum of Rs 3.15 lakhs (Rs 1.86 lakhs) being the earlier tax refund. A dividend of 20 per cent (17 per cent) absorbing Rs 14.77 lakhs has been declared. Sales have risen from Rs 5.01 crores to Rs 6.21 crores and the production from 6,226 to 7,148 metric tonnes of sanitaryware.

Precision Jewels

Precision Jewels, which made a public issue of 92,000 equity shares of Rs 10 each at par recently, has finalised the basis of allotment in consultation with the Bombay Stock Exchange. Applicants for 50 shares will be given full allotment. The other allotments are as follows (with shares allotted in brackets): 100 shares (75) 150-250 (100), 300-350 (150), 400-450 (200), 500 (225), 550-750 (250), 1,000-1,500 (450), 2,000 (700), 3,000 (1,825) and 4,000 (2,225)

Bhadrachalam Paper

Bhadrachalam Paper Boards have commenced trial runs and hope to start commercial production by October. Promoted jointly with Vazir Sultan Tobacco and Andhra Pradesh Industrial Development Corporation, the company has set up a plant near Bhadrachalam, a notified backward area in Andhra Pradesh. The mill has a capacity to produce 40,000 tonnes of paper and carton board per annum. The project originally envisaged to cost Rs 44 crores now will cost about Rs 49 crores. The bulk of the overrun is on account of meeting various infrastructural costs and also to meet the increase in excise duty and adverse fluctuations in foreign exchange. The process technology is wholly indigenous.

Ahmedabad Electricity

Ahmedabad Electricity commissioned its new 110 MW generating set on January 1, 1979. Initially, the plant operated at half its capacity owing to leakages in the underground concrete circulating water tunnel. Necessary repairs to the tunnel were carried out and the plant loaded to its rated capacity. The company now proposes to instal two more units of 110 MW generating stations and is awaiting clearance of the central government. When the operation of the new 110 MW generating plant as its installed capacity, the directors feel that the operation costs will be substantially curtailed. They, therefore, envisage good prospects for the current year.

Bharat Steel Tubes

The operating results of the Bharat Steel Tubes for the year ended March 31, 1979, have been substantially better compared to the previous year. The company has earned a gross profit of Rs 133 lakhs after payment of finance charges of Rs 166 lakhs. The net profit is Rs 42.8 lakhs after providing Rs 38.70 lakhs for depreciation, Rs 33 lakhs for taxation

Hindustan Shipyard Limited: Visakhapatnam-530005.

(A Government of India Undertaking)

T.N. COP/QPT 598/25717/VC. 171014 to 016. Quotations are invited upto 27-11-79—in triplicate to be opened on next day from Indigenous Suppliers in Sealed Covers superscribed with Tender Number and Due Date for (Thermal Insulation of Pipes, Valves and Tanks etc., as per our Tech. Specn.)

Tender Documents with Technical Specifications can be had upto 27-9-79 against requisition for Tender duly supported by Indian Postal Order (S) of Rs 10/- (Non-refundable) drawn in favour of M/s Hindustan Shipyard Ltd. Gandhigram, Visakhapatnam-5 (A.P.) Any correspondence including requisitions shall be addressed to 'The Chairman & Managing Director', M/S Hindustan Shipyard Limited, Vishakhapatnam-5, for attention of the 'Purchase Officer'. The Controller of Purchase reserves the right to reject any requisition from any party for issuance of Tender Set without assigning any reasons therefor.

davp 761 (17)/79

and Rs 18.5 lakh for investment allowance. The directors have proposed an equity dividend of 10 per cent and also preference dividend arrears for three previous years. The turnover during the year has been higher at Rs 27.32 crores as against Rs 23.75 crores. The directors state that even though steel continues to be in short supply the domestic demand for pipes for irrigation, drinking water supply, housing projects and rural development projects is quite strong.

Nirlon

Nirlon Synthetic Fibres and Chemicals, which did well during the year ended March, 1979, hopes to improve upon its performance in the current year. While the operations of the factory at Goregaon (Bombay) have been somewhat affected due to power cut, the management expects that production will be restored to the optimum level after the normalisation of the power situation. The diversification and modernisation effected during the last part of 1978-79 and in the current year will give certain additional advantages.

The conveyor belting plant at Roha (Maharashtra) has been working satisfactorily since the beginning of 1979. The company is actively engaged in starting the production of synthetic fabric reinforced conveyor belt which is presently not being manufactured in India and for the supply of which the country has to depend on imports. The technical collaboration agreement with BTR Belting Ltd, UK for the manufacture of synthetic fabric reinforced conveyor belt has been concluded and the product is expected to be marketed in the current year. The company has also commenced production of V-belts which are used widely. The company has so far spent more than Rs 8 crores on the expansion and modernisation programmes. It proposes to expand further its capacity for the manufacture of tyrecord and tyrecord fabric.

During 1978-79 sales were higher at Rs 59.38 crores against Rs 54.07 crores in the previous year. The gross profit was also higher at Rs 6.54 crores against Rs 6.05 crores. After a transfer of Rs 81.50 lakhs to general reserve No. 1 and 2. equity dividend has been stepped up to 22.5 per cent and will absorb Rs 1.57 crores (Rs 1.40 crores).

Bombay Dyeing

Mr Nusli N. Wadia, chairman and managing director of Bombay Dyeing and Manufacturing Company, has told shareholders at the annual general meeting in Bombay recently that sales during the first four months of the current year (April to July) have been 12 per cent higher as compared to the same period last year and profitability has been maintained at last year's level despite power cut and raw material shortages. He expected the current year's exports to be 10 to 15 per cent higher than those of the previous year.

United Carbon India

The directors of United Carbon India have not recommended any dividend for 1978, as against 12 per cent paid for the preceding year. According to preliminary figures, the gross profit has dropped from Rs 84.82 lakh to Rs 35.91 lakhs despite higher sales of Rs 10.02 crores against Rs 9 crores in the previous year. With depreciation requiring Rs 42.28 lakhs (Rs 43.99 lakhs), investment allowance Rs 6.05 lakhs (Rs 6.05 lakhs), taxation nil (Rs 12.50 lakhs), research and development expenses Rs 10.40 lakhs (nil) there is a deficit of Rs 22 lakhs compared to the previous year's net surplus of Rs 22.28 lakhs.

The deficit is wiped off by taking into account excess provision for taxation (Rs 1.81 lakhs), the previous year's surplus (Rs 16.23 lakhs) and a write-back from general reserve (Rs 4.77 lakhs).

ONGC

OIL & NATURAL GAS COMMISSION
6TH FLOOR, KAILASH
26, KASTURBA GANDHI MARG
NEW DELHI-110001, INDIA
Dated 29th August, 1979

Ref : DLH/WP/3/

TENDER NOTICE FOR THREE WELL PLATFORMS COMPLEX IN BOMBAY HIGH

Further to their tender notice number DLH/WP/1/ dated 23rd May 1979 and number DLH/WP/2/ dated 15th June, 1979 published in the Press, Oil & Natural Gass Commission invites tenders for the design, engineering, procurement, fabrication, transportation, erection, start up and commissioning of 3 Well platforms (one of the three platforms being an item of work in respect of which the Commission shall have an option to include or exclude from the scope of work under this tender at the time of award of work). The scope of work under this tender is briefly as follows :-

a) Three (3) four legged multi -well platforms (referred to as 'NM' and 'SD' Platforms and a third platform to be named) including all related equipment, piping, instrumentation, electrical, controls, bunk house and helideck.
b) Laying and burial of submarine flowlines and risers.

Interested bidders may please note the following :—

(a) The tender documents for the platforms NM and SD will be ready for issue on September 17, 1979. Documents for the optional (third) platform will be issued as an addendum on 15th October, 1979. Intending tenderers are advised to depute their authorised representative to collect the tender documents.
(b) The cost of the tender documents for the work under reference is U.S. $ 2,000 (U.S. Dollars Two thousand only). This should be submitted in the form of a crossed demand draft drawn in favour of Finance & Accounts Officer, Oil & Natural Gas Commission, New Delhi-110001 and made payable at any reputed bank in New Delhi.
(c) The successful tenderer will be required to carry out the work on a turnkey basis and mechanically complete and pre-commission the entire facilities. After the completion of wells by ONGC, the tenderers will be required to tie-in the wells, commission and start up the facilities.
(d) **Experience** :-Tenderers should have in ONGC's opinion sufficient capability to undertake the works proposed in all aspects and be able to show evidence of their capabilities to ONGC's satisfaction. In particular, ONGC would expect tenderers to have about four years experience in design and installation of offshore oil/gas platforms and transportation facilities and about four years experience in fabrication of offshore oil/gas platforms or of comparable installations of similar complexity.
(e) Tenderers would be required to furnish with their bids, a bid bond for U.S. $ 1 million (United States Dollars one million) valid for a period of 90 days. The successful tenderer would be required to extend the validity of bid bond for a further period until a formal contract is executed by the two parties.
(f) Bids from Agents/ Representatives will not be accepted.
(g) The last date, time and place for receipt of the completed tenders for all the three platforms shall be November 15, 1979, 1700 hours IST at the Commission's office cited above at New Delhi.

3. ONGC shall have the right to accept any tender, as also to reject any tender or even all the tenders at its discretion, without assigning any reasons therefor.

4. No correspondence on this subject will be entertained.

Sd/-
B K. Naik
Deputy Director (S & P)
davp 851(3)/79

IDBI : a year of outstanding performance

In the issue of August 24, 1979, we carried in this section the details of a study prepared recently by the Statistical Intelligence Division of the Department of Statistics, Reserve Bank of India, which revealed an improvement in the investment climate in the country in 1977-78. The operations of the Industrial Development Bank of India (IDBI) during 1978-79, the fifteenth year of its existence, are a pointer to the fact that the investment trends continued to improve last year also. The highlights of the 1978-79 performance of the IDBI are given below :

THE OPERATIONS of the Industrial Development Bank of India (IDBI) scaled new heights during the year 1978-79. The year was marked by a sharp growth in the bank's lending activities. For the first time, the annual sanctions by the IDBI crossed the Rs 1,000-crores mark. Its overall sanctions during the year, including guarantees, aggregated to Rs 1,126 crores, an increase of 48 per cent over the preceding year. Total disbursals recorded, again for the first time in a single year, an increase of over Rs 200 crores and reached Rs 680 crores.

The assistance going to the small-scale sector increased substantially by 126 per cent to Rs 310 crores. Over 95 per cent of the applications sanctioned assistance by the IDBI during the year belonged to the small-scale sector. This was made possible by rationalisation and liberalisation of procedures, delegation of powers and by introduction of the automatic refinance scheme with effect from July 1. 1978.

Operations under the domestic project finance schemes also recorded impressive growth rates. Sanctions under these schemes aggregated to Rs 283 crores in respect of 134 projects comprising Rs 256 crores by way of loans and Rs 27 crores by way of underwriting and direct subscriptions to share capital.

As in the past, the assistance by the IDBI was mainly directed to high priority projects. During the year, electricity generation and distribution, cement, chemicals, iron and steel and fertilisers accounted for bulk of the sanctions.

Disbursals under project finance schemes increased from Rs 169 crores to Re 290 crores.

Sanctions under the soft loan scheme more than doubled from Rs 46 crores to 55 projects in the preceding year to Rs 112 crores to 98 projects. Disbursals under this scheme increased from Rs 10 crores to Rs 34 crores.

Distinguishing Features

A distinguishing feature of the operations during the year was the accelaration in disbursals which was facilitated by the bridging finance scheme of the bank. In spite of these liberalisations, the disbursal, however, were somewhat slower than what one would have liked them to be, mainly due to long delivery schedules for machinery and equipment.

Sanctions of refinance assistance aggregated to Rs 417 crores covering 29,233 applications,—registering a phenomenal growth of 86 per cent in terms of amount and 124 per cent in terms of number of applications. Sanctions under the automatic refinance scheme accounted for 50 per cent of the total refinance assistance and 81 per cent of the number of applications. Disbursals under the refinance scheme increased by 76 per cent from Rs 146 crores in 1977-78 to Rs 256 crores in 1978-79.

On the export front too, the IDIB broke new grounds. A new scheme, namely, overseas investment finance scheme, was introduced in March, 1979, with a view to giving a boost to exports of capital goods. For the first time it was decided to extend pre-shipment credit to exporters in participation with commercial banks. Total sanctions of export assistance (including guarantees) crossed for the first time Rs 100-crores mark and amounted to Rs 129 crores—an increase of 32 per cent over the preceding year. Besides, the IDBI gave approval to 399 proposals, involving an outlay of about Rs 6620 crores, for bidding construction and turnkey jobs abroad by Indian exporters.

Employment Potential

The sanctions of the IDBI during the year are expected to catalyse an investment of about Rs 2,300 crores over the next three years and also provide, on completion of these projects, direct employment for about 2.2 lakh persons. Since inception, the IDBI had sanctioned up to the and of 1978-79 an aggregate amount of Rs 4,292 crores (including guarantees) to 82,481 applications and these sanctions are estimated to catalyse investment of the order of Rs 9,100 crores and provide direct employment for about 12 lakh persons.

The IDBI also liberalised its seed capital scheme to enable all entrepreneurs who have acquired the necessary technical know-how, have viable projects and need financial assistance, to avail of assistance under the scheme. With a view to alleviating the sufferings caused to entrepreneurs by national calamities such as cyclones, floods, etc, a new facility known as the special refinance facility, was introduced in 1978-79 and assistance to the order of Rs 122 such as was extended to 347 units which were affected by floods in West Bengal and cyclone in Andhra Pradesh.

Backward Areas

A notable feature of the operations of the IDBI during the year was that of the 247 districts declared as backward by the Planning Commission, IDBI's assistance has now reached to as many as 245 districts. Assistance sanctioned to projects in backward districts during the year was as high as Rs 406 crores.

Organisationally, the IDBI has effected some changes of far reaching importance. Two advisory committees, namely, small and village industries credit committee and international finance committee, were constituted. These committees, with advisory role, will provide feedback on the working and problems in the respective areas and help evolve suitable policy framework for increasing the flow of credit to these sectors.

A branch office was also opened at Simla in Himachal Pradesh. The work relating to sanctions and disbursals was decentralised and powers of the heads of the branch and regional offices have been enhanced.

The full impact of all the liberalisations and new schemes introduced by the IDBI is expected to be felt during 1979-80. The disbursements by the IDBI to industries are expected to grow beyond Rs 900 crores next year.

ANNEXURE I

IDBI Assistance Sanctioned and Utilised During 1977-78 and 1978-79 (July-June) and Since Inception

(In crores of rupees)

Types of assistance	Assistance sanctioned 1977-78	Assistance sanctioned 1978-79	Assistance sanctioned July 1964 to June 1979	Assistance utilised 1977-78	Assistance utilised 1978-79	Assistance utilised July 1964 to June 1979
1. Direct Industrial Assistance						
(a) Direct loans to industrial concerns (other than for exports)	251.8	374.6	1274.5	169.9	251.6	770.5
(i) Normal	202.3	255.9	1072.1	157.6	214.0	719.7
(ii) Soft loan	46.0	112.3	190.0	9.5	33.7	44.2
(iii) Technical Development Fund	3.5	6.4	12.4	2.8	3.9	6.6
(b) Underwriting of and direct subscription to shares and debentures of industrial concerns	20.1	27.4	146.1	11.5	6.3	66.1
2. Refinance of industrial loans	224.2	417.3	1318.6	145.5	255.5	892.1
3. Rediscounting of bills	133.4	139.3	920.5	99.6	104.1	721.8
4. Subscription to shares and bonds of financial institutions	32.7	39.0	154.4	28.4	41.3	151.4
Total Project Assistance (1 to 4)	662.2	997.6	3814.1	454.8	658.8	2601.9
5. Export Finance	47.3	63.6	316.6	19.4	21.2	175.1
(a) Direct loans for export	18.1	12.5	132.0	11.0	12.4	95.4
(b) Refinance of export credit	6.6	8.9	67.9	4.0	4.0	54.2
(c) Oversea's buyer's credit	3.1	2.9	25.1	3.6	2.0	11.1
(d) Foreign lines of credit	19.5	36.6	89.0	0.7	2.7	14.4
(e) Overseas investment finance	—	2.6	2.6	—	—	—
Total (1 to 5)	709.5	1061.2	4130.7	474.2	680.0	2777.0
6. Guarantees for loans and deferred payments	—	—	26.7	—	—	19.6
7. Export guarantees	50.0	64.9	161.5	51.5*	60.5*	141.8*

*Guarantees executed.

ANNEXURE II

Details of the Top Ten IDBI-assisted Projects During 1978-79 (July-June)

(In crores of rupees)

Name of the company	Project cost	Assistance sanctioned Loan	Assistance sanctioned Underwriting	Assistance sanctioned Total
1. Calcutta Electric Supply Co Ltd	119.00	46.00	—	46.00
2. Kerala Mineral and Metals Co Ltd	65.00	21.50	—	21.50
3. Tata Electric Campanies Ltd	182.00	16.25	3.25	19.50
4. Narmada Cements Ltd	56.41	14.27	2.00	16.27
5. Tuticorin Alkalies and Chemicals Ltd	39.75	11.50	3.00	14.50
6. Deepak Fertilisers and Petrochemicals Ltd	35.00	9.58	3.00	12.58
7. Orissa Sponge Iron Co Ltd	24.00	9.50	1.70	11.20
8. Andhra Pradesh Rayons Ltd	32.00	5.00	1.50	6.50
9. Raasi Cements Ltd	19.60	5.15	0.85	6.00
10. Tata Iron and Steel Co Ltd	170.00	6.00	—	6.00
Total	742.76	144.75	15.30	160.05

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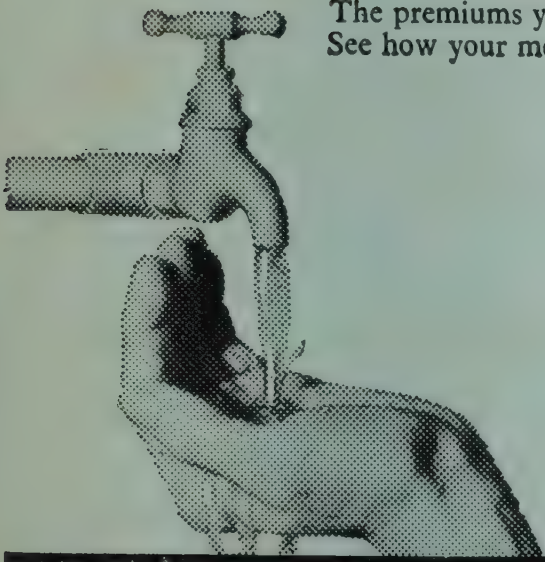

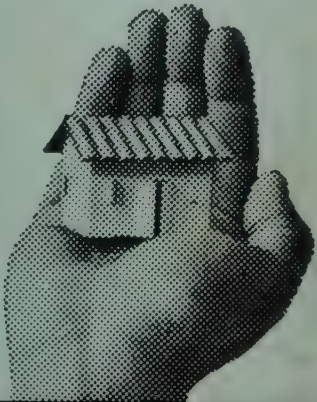

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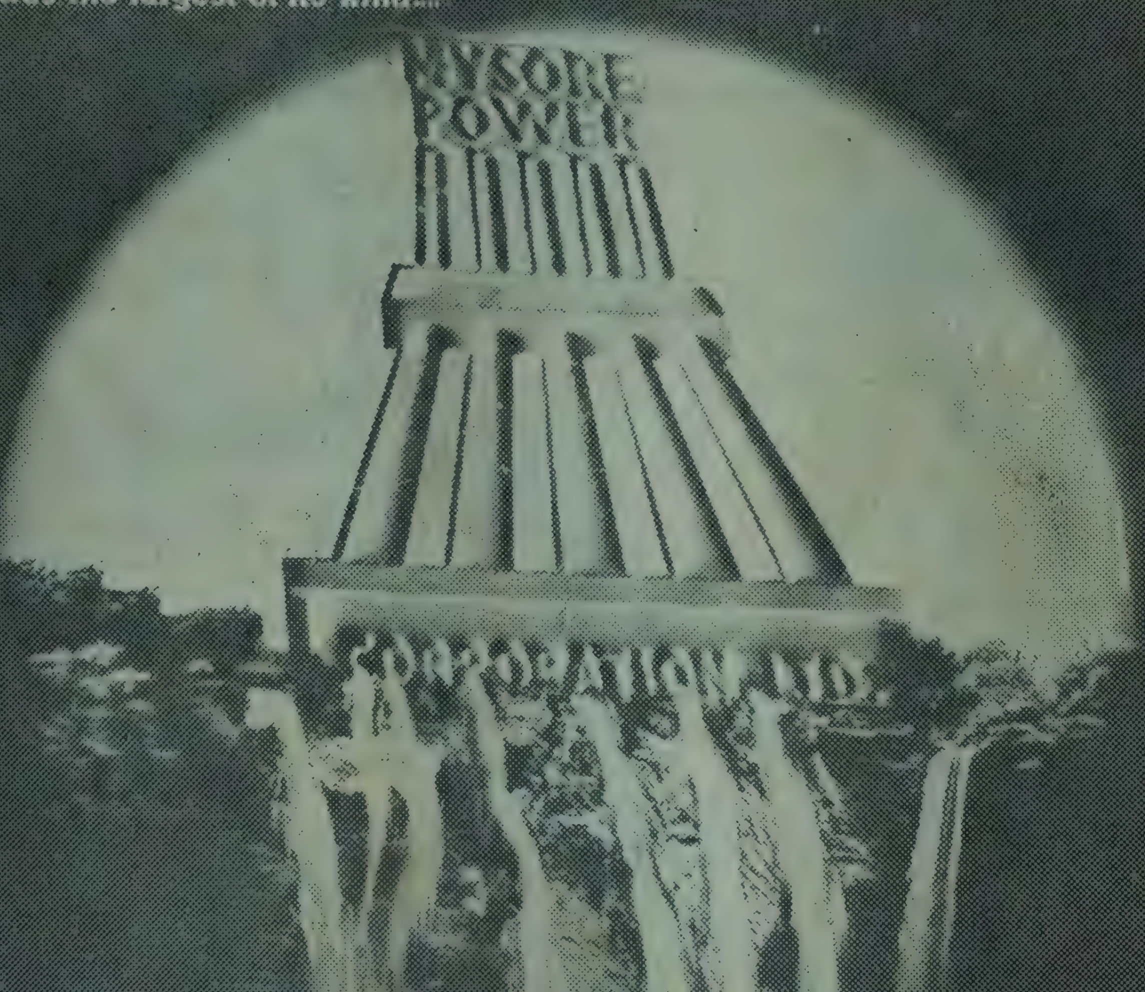

Mysore Power Corporation Ltd.

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eastern ECONOMIST

SEPTEMBER 14, 1979

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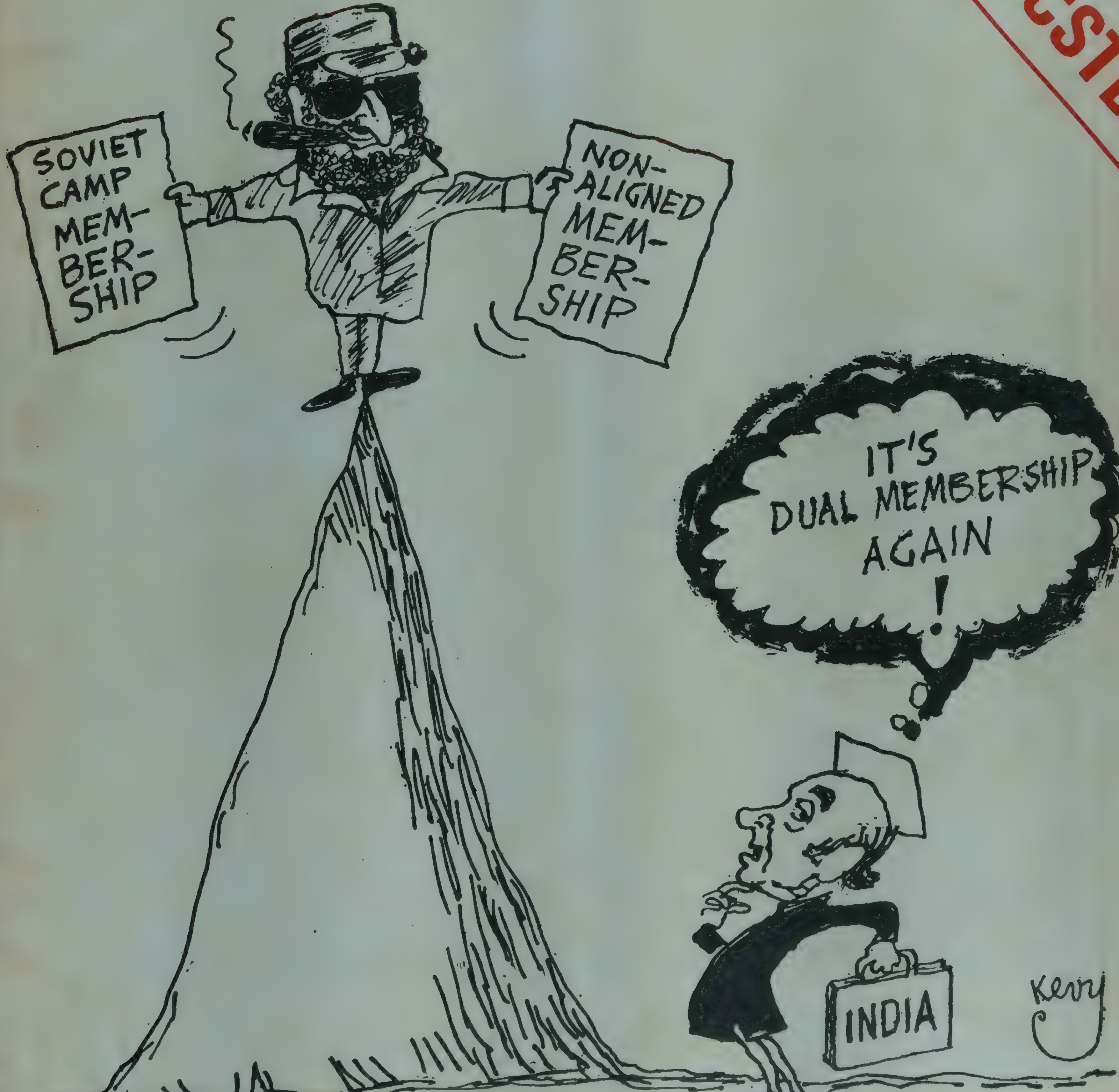
A Look at UNCSTD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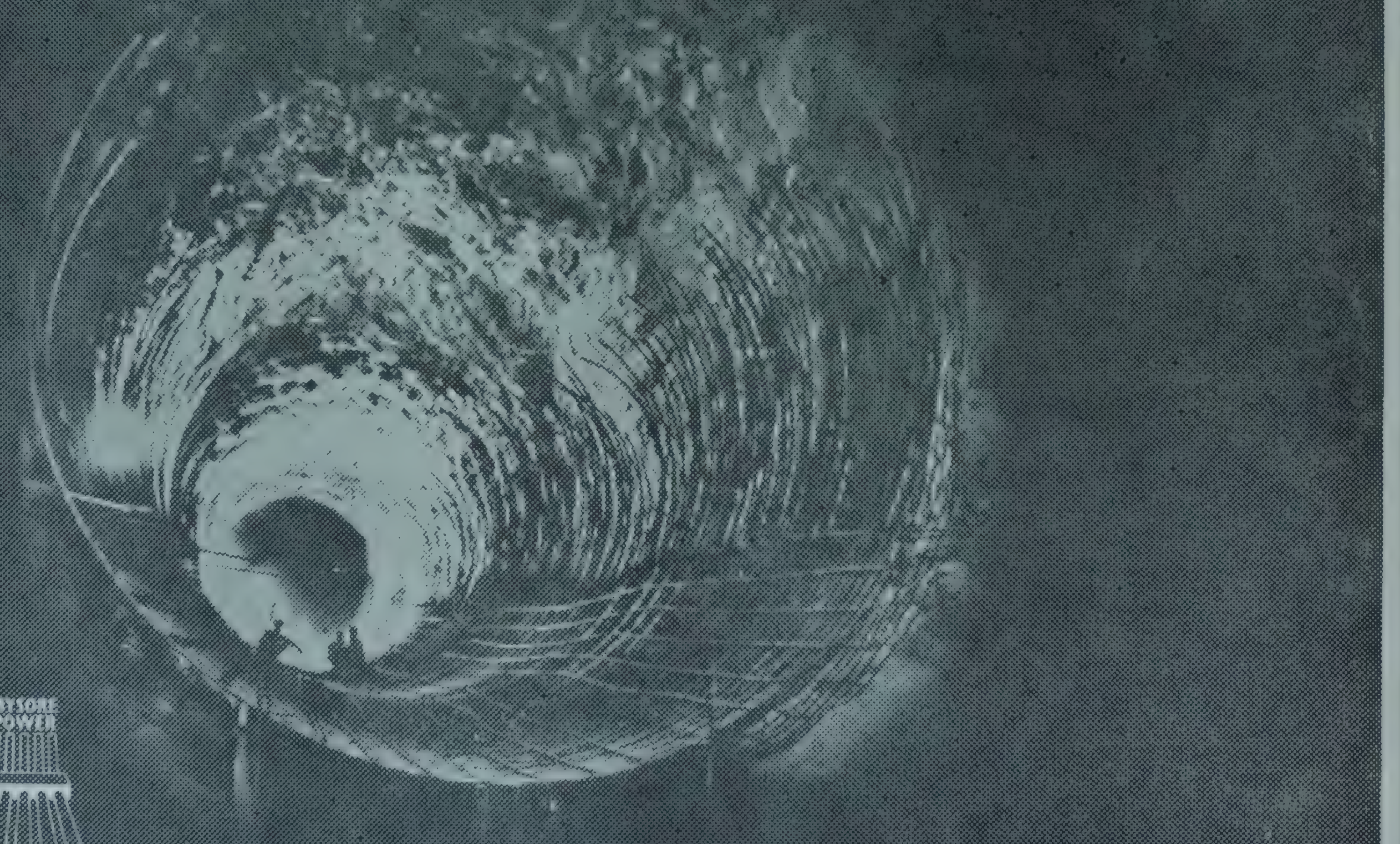

MYSORE POWER CORPORATION LTD.

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In the nation

Food : facts and fears

ON THE occasion of the golden jubilee of the Indian Council of Agricultural Research, the indifferent performance of the south-west monsoon this year has reminded us that our green revolution is still very much earth-bound. The skies and clouds remain alien. This reminder is valuable as it makes us conscious of the great deal of work that has to be done in terms of developing and conserving our water resources and integrating water use with other aspects of crop management.

Meanwhile, serious as the drought conditions in some parts of the country are, it may still be found that some part of the current breast-beating could have been avoided. After all, after three successive years of good or even generous monsoons it was highly probable statistically and predictable meteorologically that the rains this year might be sub-normal. Even in years of good rainfall it has always been the case with this vast and variable land of ours that all parts of it are not evenly served. That so many areas of the country should now be so severely affected with drought, however, makes for a considerable difference in kind. Nevertheless the adverse effect which the partial failure of the rains will have on the food or other aspects of the agricultural economy needs to be more calmly assessed than may be prompted by some of the more hysterical reactions in lay quarters.

The Agriculture ministry has rightly been in no haste to give its official review of the kharif harvests. It has judged it proper to wait till the end of this month since showers, if any, during September could help save some part of the standing crop in the drought-affected areas. Since there is much alarmist speculation in the country, however, about the kharif outlook, the secretary of the ministry has found it necessary to share with the public the official views of the ministry regarding probable shortfall in kharif production. While he has not found it possible to name a figure at present, he has said reassuringly that there would be no crippling loss of crops. The ministry no doubt will engage itself in a continous high level review of the crop data coming to it in the anxious weeks ahead and it should find both opportunity and time for keeping the people informed of farm production prospects as well as of the steps that may be taken to reduce crop losses in the affected areas. This kind and quality of information service is absolutely necessary if public confidence is not to be undermined by exaggerated pessimism fed by speculative reports in the press and elsewhere. In fact, rumours are being floated to the effect that cereal production will suffer to the extent of from eight million to 12 million tonnes while the output of rain-fed coarse grains and pulses may be down by as much as 60 per cent. It is clear that these reports put considerable pressure on the government to come forward with official estimates of the kharif situation as early as possible.

Meanwhile the government could help maintain national morale by ensuring that the areas worst affected by drought are kept adequately supplied with relief stocks of foodgrains and other essential commodities. Among the states, MP, Rajasthan, UP, Bihar and West Bengal may be particularly in need of such ministration. The food-for-work programme should be executed with special vigour in such areas as a measure of direct relief to landless labourers and unemployed or under-employed rural artisans. The transport of foodgrains from surplus producing areas should be facilitated by promoting the efficiency of both rail and road transport. Wherever the public distribution system is in force steps should be taken to ensure that fair price shops receive stocks regularly and in adequate quantities. Simultaneously, no impediments should be placed in the way of the open market playing its proper role.

Nothing should be done to spread the impression that there is a scarcity of foodgrains or basic commodities in the country since in fact there is no such scarcity of an order justifying panicky reactions on the part of consumers. There is of course the problem of discouraging hoarding and this again could be done only by discouraging speculative pessimism and maintaining the morale of the public by ensuring the efficient deployment of government stocks and the smooth functions of trade channels. It is quite true that the probable shortfall in farm production has complicated the general inflationary situation to some extent. But it is still very much within the power of the government to ensure that the general price level is not unduly pushed up by the unwarranted nervousness on the agricultural front.

Off the rails?

THE DECISION taken last week at a meeting of the zonal general managers of railways to drastically reduce the target of moving 222 million tonnes originating revenue-earning goods traffic this year to just 204 million tonnes has not come as a surprise. Railways suffered a shortfall of as much as 11 million tonnes in the originating goods traffic between April and July for various reasons—both external and internal. It indeed, is very difficult to make up for this lost traffic during the remainder eight months of the year. The scaling down of the target, of course, is an indication of the fact that the railway administration does not expect traffic offerings or the movement to even match the proportionate budgetary projections during the eight months to March next year.

The havoc played by inadequacies of coal and shortages of power, particularly in the eastern region, on the entire economy, indeed, has been the major external factor affecting railway operations. Another important reason beyond the control of railways which has had a telling effect on their working has been the decline in iron ore exports. But as the Railway Board chairman, Mr M. Menezes, admitted candidly during his talk with pressmen last week after the zonal general managers' meeting, the internal factors too have been responsible to no insignificant extent for the deterioration in performance. The internal factors include labour trouble which has manifested itself in a menacing manner in the eastern region in frequent go-slows, work-to-rule agitations and wildcat strikes by some of the employees. To some extent, railway operations have also been affected by such other external factors as tardy unloading in the Calcutta and Bombay areas and the difficulties of securing materials in adequate quantities for the maintenance of the rolling stock from the Calcutta-based suppliers on whom dependence has been substantial due to historical reasons.

The situation in regard to the goods traffic moved by railways, in fact, would have been worse if they had not been called upon to move larger quantities of foodgrains from the surplus states of Punjab, Haryana and western Uttar Pradesh to the far flung areas in the north-east and down south, originally as a measure to build up stocks in these consuming areas to ease the storage problem in the surplus producing states and currently owing to the severe drought that has ravaged agriculture in many parts of the country.

scarce coal

Notwithstanding some improvement that has been registered in railway loadings in the latter half of the last month, during which the loadings rose to 23,505 wagons per day from 21,780 wagons a day in the former half of the month, and the likelihood of moving some larger quantities of foodgrains to the drought-hit areas, it remains to be seen whether even the revised target of moving 204 million tonnes of originating goods traffic during the year will be accomplished. Misgivings on this score arise owing to the fact that although there will be a substantial increase in the power generation capacity in the country in the coming months, power shortages may get accentuated rather than being mitigated unless the coal supply position improves substantially.

The water level in the major reservoirs is claimed to be somewhat satisfactory at present despite the failure of rains till lately (the drought spell has been broken by light to moderate rains in several areas of the nothern states). Yet apparently any large increase in hydel generation this year cannot be counted upon. There is every possibility of hydel generation showing even a negative rate of growth. This casts an additional burden on the thermal sector and that is why there is need for stepping up coal supplies markedly.

crucial factor

There is said to have been some improvement in the raisings as well as the movement of coal recently, which is reflected in the stocks with the steel plants going up, even though marginally, and those with railways increasing to the level of 3.8 days' requirements from three days' needs a few weeks ago. But a crucial factor to be taken note in this regard is that the DVC system, which caters for the power requirements of the collieries in the eastern region, is currently able to generate power to not more than 25 per cent of its capacity. With the power situation likely to continue to be precarious in the eastern zone, it will be just foolhardy to expect that miracles will happen on the coal front.

The shortfall in the revenue-earning goods traffic movement by railways which has already taken place and the passenger traffic also failing to materialise according to expectations, primarily due to cancellation of several passenger trains for want of coal (all the services, Mr Menezes has revealed, cannot be restored unless railways are able to build up stocks to the level of five or six days' requirements), however, may not erode railways' finances to the extent which could have been feared. This is because the lead of goods traffic is said to have gone up from 706 kms to as much as 730 kms. In terms of tonne-kilometres, therefore, the shortfall in goods traffic has been comparatively less. During the three months to June-end, the total earnings of railways fell short of the proportionate budgetary estimate by Rs 45.59 crores. The deficit incurred till then taking into consideration the increased operational costs, was

Rs 54.24 crores. As there is no likelihood of the goods traffic coming up to expectations even during the eight months to March next, as stressed earlier, the possibility of railways going again to the red cannot be ruled out.

The provisions made in the budget on anticipatory basis in regard to the increased costs of coal, steel, diesel oil and other materials as well as for the payment of additional dearness allowance to the employees resulting from the inflationary tendencies in the economy, undoubtedly, should prove inadequate. The minister for Railways, budgeted this year for a surplus of Rs 89 crores. But this figure was scaled down later to Rs 71 crores as a result of the post-budgetary concessions announced to the tune of Rs 18 crores.

labour unrest

With a view to containing labour unrest two important decisions were taken at the last week's conference of the zonal general managers. First, the corporate enterprise groups are envisaged to meet once a month to review performance and suggest ways and means for improvement. Second, the disciplinary provisions are proposed to be enforced concertedly. It has been made clear to the labour unions that the principle of 'no-work no-pay' is to be insisted upon. In certain cases, the provision of break in service too will be invoked if wildcat strikes are not stopped. The main cause of concern in regard to industrial relations on railways, however, is how the demand of the employees for the grant of bonus is resolved. It is a major policy decision and the present caretaker government obviously will not be in a position to decide on this issue. It is, therefore, difficult to say what turn industrial relations on railways will take during the coming months.

Officers' groups have been formed to keep a close watch on the running of trains. This is stated to have yielded some results already. The punctuality of trains, which had gone down early this year to as low as 72/73 per cent is now said to have been improved to 85 per cent. Efforts are being made to explore and foster alternative sources for the supply of materials required for maintenance purposes.

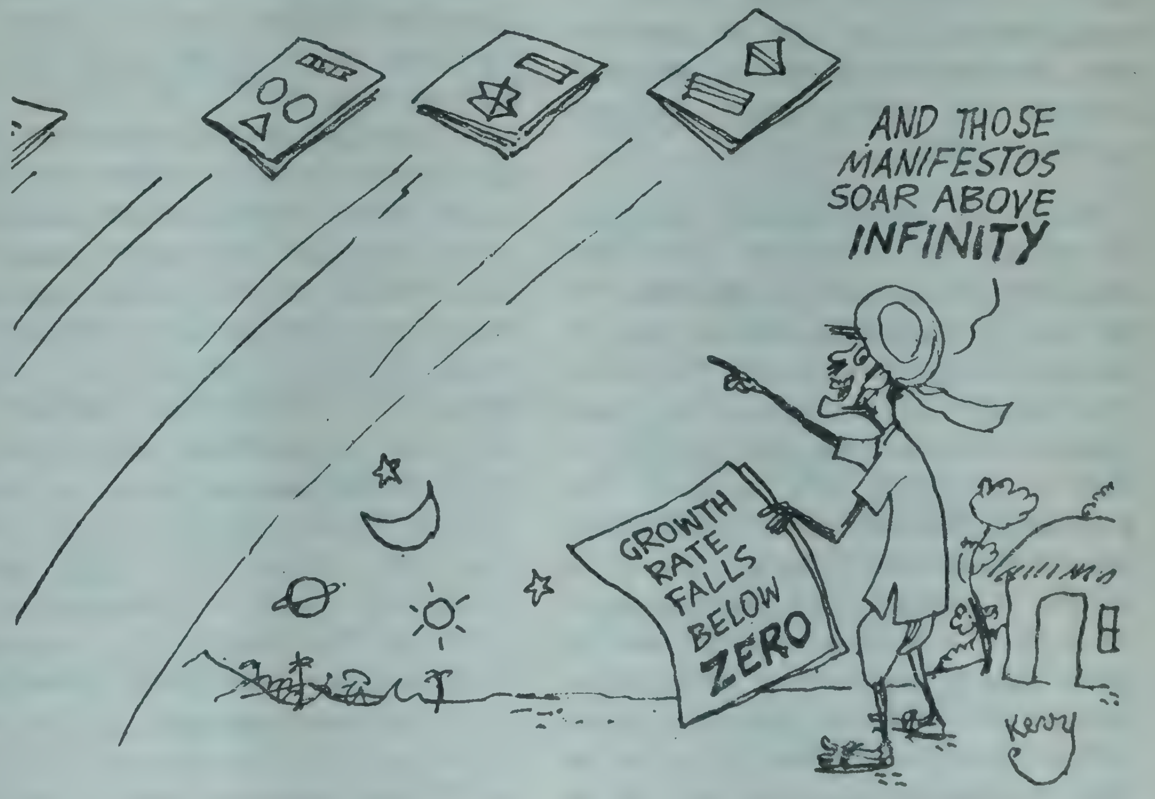
In a bid to increase the turn-round of wagons, which has deteriorated due to the tendency in some areas of utilising wagons for storage purposes by traders, apart from the lengthening of the traffic lead, it has been decided to enhance the demurrage and wharfage rates. While the present rate of demurrage will continue at most stations, the zonal railways have been authorised to levy 50 per cent higher demurrage rates at big stations with heavy traffic. Also the existing special higher demurrage rate of 60 paise per tonne per hour, which is imposed at specific stations after due notification, will be enhanced to Rs 1.50 per tonne per hour.

As regards wharfage, the existing rates are to be left untouched at the smaller road-side stations. At the major stations however, the rates will be increased by 50 per cent and at medium-sized stations by 25 per cent. The special higher wharfage rate will be stepped up from 60 paise to Rs 1.50 for 50 kgs per day. The present maximum rate of luggage and parcel will be increased from 35 paise to 70 paise per 50 kgs. Special low wharfage rates for bulk commodities, of course, are to remain unchanged.

In the interest of discouraging speculative bogus registration of indents, it has been decided that the exemption from the imposition of the wagon registration fees should be withdrawn in respect of all commodities. Railways levy wagon registration fees(per wagon) at the following rates : B.G. wagons of all types Rs 70; M. G. wagons Rs 50 and NG wagons Rs 30. These fees are adjustable against the freight after the indented wagons have been allotted and the parties have availed of the wagons. They are forfeited if the the parties do not use the wagons after they have registered the indents. Owing to the easy availability of wagons prevailing in earlier years, a large number of commodities were exempted from the wagon registration fees in 1975.

With a view to relieving wagons from foodgrains movement to such other commodities as tea, sugar, taxtiles. food, the railways have asked the Planning Commission to make a quick study of the feasibility of transporting foodgrains to south India by coastal shipping. The prospects are considered good for such a programme through the Kandla port. If this proposal materialises, the congestion on the grand trunk route should get relieved to a considerable extent.

A committee is being set up to study the mechanisation of trans-shipment of goods at the points where trans-shipment


AND THOSE MANIFESTOS SOAR ABOVE INFINITY
GROWTH RATE FALLS BELOW ZERO

takes place from broad gauge to metre gauge. Another committee has been appointed to study the lead of various commodities to see whether there can be any rationalisation of movement and the present freight structure.

Containing the priceline

SEVERAL DECISIONS have been announced by the central government to arrest the continuing upward trend in prices. Though welcome from the consumers points of view, owing to the fact that the items relating to which decisions have been taken belong to the category of mass consumer goods, at least a couple of decisions can be expected to raise many an eyebrow.

The decisions announced include : (i) re-imposition of statutory price control on sugar, fixing the maximum retail price in the southern region at Rs 2.90 per kg and in the northern region at Rs 3.00 a kg (the ex-factory prices will be statutorily fixed to correspond to the retail prices) ; (ii) cut in the excise duty on kerosene and high speed diesel oil by seven paise per litre ; and (iii) ensuring of adequate availability of wheat products such as suji and maida at reasonable prices during the coming festival season and of controlled cloth, the common varieties of cloth such as dhotis and sarees, janata cloth and handloom fabrics.

Besides the above specific measures, the minister of Commerce and Civil Supplies has been asked to hold talks with the state governments with a view to taking effective measures for the proper distribution of edible oil and with manufacturers for ensuring price stability as well as availability of vanaspati. The government feels that there is no justification for the uptrend in the prices of edible oil and vanaspati. This phenomenon, it thinks, has been caused by the inability of the state governments to lift, adequate stocks from the STC in time and to make sufficient arrangements for their distribution. No justification is also seen in the continuous marking up of the prices of vanaspati by manufacturers.

It has also been decided that a conference of chief ministers, of states should be convened expeditiously to impress upon them the need for stricter enforcement of the Essential Commodities Act and the existing regulations against hoarding and profiteering. It is felt that the state governments are not taking concerted steps to check the price rise.

The government has as well noted the hardening tendency in the prices of foodgrains, but is of the view that there is no reason for these prices to go up as the Food Corporation of India has abundant stocks with it. The small upward trend in the prices of rice in some areas, it is felt, is attributable to consumers' preference for the finer varieties.

With a view to keeping a continuous watch over the priceline and ensuring effective coordination amongst the different segments of governmental machinery connected with the task, it has been decided to appoint a separate secretary in the cabinet secretariat. A cabinet committee is also to be set up to keep a close vigil on the drought situation in the country so that expeditious action can be taken to deal with it.

controversial decisions

Of the above decisions, the two which indeed are controversial relate to the re-imposition of price control on sugar and the scaling down of the excise duty on kerosene and HSD. No doubt, sugar prices have gone up quite markedly since the removal of both the price and distribution control over this commodity about a year ago, the government appears to have erred in deciding to fix the retail prices at Rs 2.94 per kg for the southern region and Rs 3.00 a kg for the northern region. The distribuiton control over sugar was re-introduced, first informally several months ago and later on statutorily more recently, in the interest of ensuring some improvement in its prices, which, according to government's own admission, had declined to uneconomic levels entailing huge losses to the industry. The expectation then was that sugar prices would stabilise between Rs 3 and Rs 3.25 a kg at the retail level, enabling the industry to earn a modest margin of profit in the interest of keeping up production and ensuring payment of the statutorily fixed cane prices to the growers. Since the dual pricing system had been done away with in the case of sugar, it was obligatory on the part of the government to fix the controlled prices at reasonable levels that would not have only covered the cost of production, which owing to the statutorily fixed cane prices leave very little manoeuvrability for the industry to adjust its economy, but would also have allowed a reasonable return on the capital employed. The government apparently has shown scant respect for the economic criteria in fixing controlled prices.

serious complications

This step can be expected to create serious complications during the ensuing crushing season even though consumers might get some relief. immediately. The current cane crop, report suggests, is none-to-abundant and the likelihood of further decline in sugar output next year cannot be ruled out. The shortfall in output this year and increase in consumption also have eroded the built-up stocks considerably, even though this was warranted to some extent owing to the earlier expectations of unduly large stocks remaining unsold at the end of the current sugar year.

The cut in the excise duty on kerosene and HSD has come as a surprise as the prices of both these petroleum products, along with those of others were raised substantially only last month for the second time during the current financial year in the interest of obviating losses to the refineries resulting from the sharp hike in the prices of crude oil. As a sequel to the price increases effected through the budget on February 28 and subsequently on August 16, it was thought that the additional burden of Rs 1,150 crores on the economy arising from the crude oil price hike would be overwhelmingly counterbalanced, if not fully, obviating any subsidy from the centre to meet the losses of the refineries. The kerosene and HSD excise cut will surely enlarge the budgetary deficit this year, even though steps are claimed to have been initiated to contain the deficit through curtailing to the extent possible the non-developmental expenditure. The sharp rise in prices since the presentation of this year's budget, the sluggishness on the industrial front and various other factors have already led to a sizeable increase in expenditure. The governmental revenues have also been affected. This will undoubtedly have serious repercussions on the budgetary deficit. The government perhaps little realises that deficit financing is more detrimental to the interests of the vulnerable sections of society than some direct increases in the prices of the goods required by them.

'She' includes 'he'

THE APTEST comment on the Gupta commission report on the "Maruti affair" was that made by Mr Jagjivan Ram in a different but not unrelated contest. "She" he quipped, includes "he". While many of us may have been impressed by the effective documentation by the commission of the personal involvement of the then prime minister, Mrs Indira Gandhi in the excessive and improper favours extended by the government to her son for his so-called small car project, what is really frightening is the evidence which the report has adduced in such abundance of the outrageous ease with which Mr Sanjay Gandhi could exploit for his private profit the "derivative authority" that became vested in him by the simple fact of his being his mother's son. Ministers and entire ministries spread themselves out to do his bidding and for describing the resultant state of affairs the commission employs the chilling words that everything Mr Sanjay Gandhi wanted done was done by ministers and officials cowed down by the feeling that Maruti was a sensitive matter. Never had a single private individual set out to violate or procure the violation by the officials of the government the laws of the land with such arrogance and sense of complete immunity as did Mr Sanjay Gandhi with the maternal connivance and collaboration of the woman who at that time was also the prime minister of the country.

The political fall-out of the Gupta commission report is specially significant because of the forthcoming mid-term poll. How the caretaker government, left to itself, would have handled the report must now remain a matter for speculation. What is a fact is that, in officially releasing the report, it has found itself compelled to do so by the president of the Janata party who, after issuing an ultimatum to the government to publish the report, himself gave the press the first instalment of its contents and also gave notice of his intention to place before the public further instalments if in the meanwhile the government continued to refrain from officially publishing the report. Mr Chandra Shekhar has been taken to task in some quarters for his public disclosure of a government document when it was being studied by the cabinet. The Janata party president has rightly refused to take this criticism seriously.

The question, surely, is whether the public interest has been served by the publication of the report or not. There can be no doubt about the answer because the public has a right to know the findings of a judicial commission set up for the express purpose of investigating the abuse of power by the prime minister and the violation of laws by her son for personal aggrandisement or profit during the emergency or earlier. Since there was clearly delay in the official release of the report somebody had to take the initiative and ensure that the public did in fact come to know what was emphatically in its interest to know. It is no doubt the case that there is much political capital to be made out of the report by political parties which are determined to ensure the defeat of as many as possible of the Gandhi candidates at the mid-term poll and thereby prevent her return to power. Mr Chandra Shekhar himself has bluntly said that his party will use the Gupta commission report to the full extent for reminding the people of the emergency excesses and the authoritarian record of Mrs Gandhi so that the electorate may appreciate the danger of her party achieving the status of a significant political force through its performance at the hustings.

It is, of course, possible that the Janata party president and other political leaders opposed to Mrs Gandhi are exaggerating the impact of the Gupta commission

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Vol 73 No. 11 September 14, 1979
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IN THE NATION 531-538
Food : Facts and Fears
Off the Rails ?
Containing the Price Line
'She' Includes 'He'
Making Plantations Yield More
Credit Curbs and Eastern Region
WINDOW ON THE WORLD 539-542
Havana Summit : Summing Up
UK's March Towards Oil Self-Sufficiency
Global Trade Trends
Expanding Role of ADB
Thailand's Tin Mining
MOVING FINGER 543
SPECIAL FEATURE 544
A Look at UNCSTD
POINT OF VIEW
Coal Nationalisation : Its impact on Economy—*Virendra Agarwala* 548
Monetarists vs Structuralists Controversy in Indian Context —*Dr. S.K. Awasthi* 550
BOOKS BRIEFLY
Complexities of Rural Development 553
Books Received 561
TRADE WINDS 562
COMPANY AFFAIRS 566
COMPANY MEETINGS
The Tata Power Co Ltd 571
Bombay Subarban Electric Supply Limited 574
RECORDS & STATISTICS 575
Long-term Growth Trends in Indian Agriculture : 1950-78

findings on public opinion, especially in the countryside. People unfortunately have become de-sensitized to corruption and abuse of authority in high places. In any case the poll is still about four months away and much of the impact which the Gupta commission report may immediately have on public opinion could get dissipated by the voting date. However, it is quite cleat from the angry and even hysterical reactions of Mrs Gandhi's followers to Mr Chandra Shekhar's initiative in compelling the official release of the report that she and her camp are quite upset over the possible consequences for her political future and fortunes of the damning evidence against her as evaluated by the Gupta commission.

Meanwhile there is much speculation about the further handling of the report by the caretaker government. The committee of secretaries which was asked to study it and indicate what action the government may take has for obvious reasons tectfully left to the cabinet the responsibility for making up its mind on whether to proceed against Mrs Gandhi, her son and the then ministers who had been found by the commission to be guilty of abuse of power or otherwise responsible for improprieties such as violations of laws or breaches of government rules and procedures. Meanwhile pressure is building up in favour of the government proceeding effectively against Mrs Gandhi on the basis of the Gupta commission report. Demands for early and effective action are cutting across party lines.

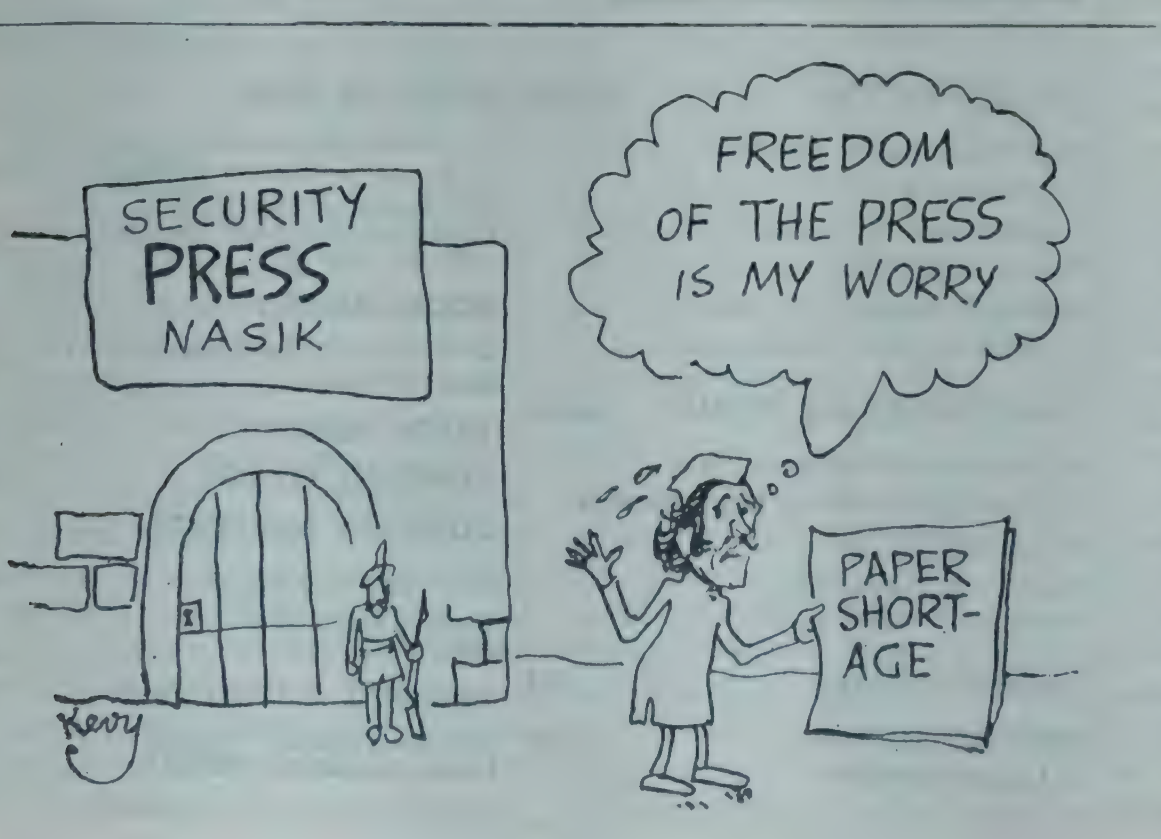
Making plantations yield more

THE EFFICIENCY of plantation agriculture and the importance of perspective planning with a view to maintaining and improving even the rate of growth achieved in the past decade were the main thrusts of the speech of the President of United Planters' Association of Southern India, Mr. K. J. Tanna, at the 86th annual conference held at Coonoor recently. Rather unusually, the president did not dwell upon the problems of the different plantation industries. Nor was there any harangue by central ministers and others over what the estate owners should do or what their social responsibilities were. It has been the usual practice that some dignitaries from the centre are invited to address the conference of planters along with the representatives of the state governments. An opportunity for addressing the gathering was also provided to Mr Minoo Masani who agreed that mechanised and sophisticated plantation agriculture had paid good dividends and concerted efforts should be continued for improving further the stature of the different plantation industries. It was, however, his view that individual farming by small agriculturists can be as efficient as plantation agriculture. He cited the impressive success of the Japanese ryots as compared to mechanised large-scale farming in the USA and collective farming in the Soviet Union.

The development of agriculture will necessarily have to be on different lines in the plains and the philosophy of plantation agriculture will be applicable only in so far as it has been abundantly proved that new techniques and new inputs will improve productivity and lead to better use of scarce land resources. In view of the political overtones involved in land development and ownership in the plains, the sermon of Mr Tanna may not be generally heeded, especially as a breakthrough has been achieved in the cultivation of cereals and some commercial crops in the past few years. But the UPASI president was quite justified in highlighting the spectacular performance of the estate owners under difficult circumstances and in areas where the infrastructure facilities are not available on the desired scale.

matter of pride

It is, indeed, a matter of pride that the yield of tea per acre, or even coffee, is among the highest in the world and plantation interests from other countries have visited efficient estates in the southern as well as the north-eastern regions of India for making studies on the spot. As Mr Tanna pointed out, the output of tea has risen in the past two decades to 571 million kgs from 326 million kgs, that of coffee to 1.07 lakh tonnes from about 50,000 tonnes and that of rubber to 1.35 lakh tonnes from 24,000 tonnes. The area under tea has increased to only 3.64 lakh hectares from 3.16 lakh hectares in 1950-51, while in 28 years there has been a doubling of production, implying that it was not necessary to increase the area under the crop proportionately because of improving efficiency. The area has actually increased by less than 20 per cent against a spurt in production by 100 per



cent. In the case of coffee, the area has doubled to 1.88 lakh hectares from 93,000 hectares in 1950-51, but the output has increased more than five-fold to 1.07 lakh tonnes. As regards rubber the area has risen to 2.25 lakh hectares from 69,000 hectares in the same period, while the output has increased nine-fold to 1.35 lakh tonnes, the peak being 1.47 lakh tonnes.

These details speak for themselvse. It can certainly be expected that a further increase in yields can be achieved with vigorous implementation of the replantation programmes in tea, coffee and rubber and greater assistance to smaller growers in the rubber and coffee industries. The latter two plantation crops are raised to a significant extent by small growers and it has been repeatedly complained that there is considerable disparity between the performance of the bigger and smaller estates,

timely warning

While the deficiencies in this regard could and should be rectified, Mr Tanna's warning against extension of the activities of the public sector in the plantation industry should be heeded. There is no point in taking away reserve land indiscriminately from the existing estates, except where these lands exist in areas remote from the developed estates and other interests may be encouraged to take to plantation agriculture. Even here a cautious policy is needed as fresh investment by new owners may be costly if the infrastructure facilities had to be created anew and competent management personnel have to be found. But there is no justification for taking away reserve land contiguous to the existing estates on payment of meagre compensation and creating difficulties in the way of fresh development.

If the progress in the past three decades has been remarkable, the growth in the next two decades will have to be even more spectacular. And it has to be remembered that only about 25 per cent of the additional production in the next two decades can be secured from the existing area under different crops. Also as replantation programmes yield results only over a period of time and there has to be simultaneous extension of acreage under different crops for expanding the base, early decisions have to be taken in regard to the use of reserve land at the disposal of the existing estates. There may be controversies over concentration of ownership or other aspects of future expansion, but the importance of proceeding on systematic basis cannot be overlooked as the output of tea has to rise to 1,250 million kgs by 2000 AD—an increase of about 120 per cent from the existing level. The production of coffee has to double at least to 2.25 lakh tonnes in the next two decades and that of rubber to treble to four lakh tonnes.

ambitious targets

These targets are truly ambitious but not fanciful and the plantation industries have to be accorded the highest priority. As has been suggested in some quarters, there has even to be a separate ministry for this purpose at the centre, especially as the cultivation of cardamom, pepper, cashew and other items has to be carried out intensively. The contribution to foreign exchange earnings too has been sizable and can increase in absolute terms as well as in proportion, even while efforts may be made to promote non-traditional exports. The value of exports of the main plantation products in 1976-77 was only Rs 576 crores or 11.2 per cent of the aggregate exports. With a boom in world market, the value of these exports jumped to Rs 985 crores in 1977-78 and the proportion to 18.6 per cent of total exports. In 1978-79, there was a drop to Rs 640 crores because of a slump in tea and cashew prices. In 1979-80, the contribution may be higher at Rs 740 crores with a recovery in tea prices and higher average prices for coffee. The share of exports of plantation products in the total can be easily Rs 1,000 crores regularly if only cardamom, pepper and cashew can make a bigger contribution, tea exports are effected intelligently and official predilection and prejudices do not have disturbing effect.

It is necessary, however, to ensure that the required surpluses are available for export as domestic consumption may rise awkwardly and exports may have to be curtailed if internal production does not rise correspondingly. It is also imperative that the existing weakness in rubber should be eliminated. When a surplus can be profitably exported in a changing situation, it is, indeed, a pity that there should be a deficit and rubber has to be imported on a costlier basis for meeting this gap.

Credit curbs and eastern region

ALMOST ALL the major industries in the eastern region have expressed their regret and resentment at the directive of the Reserve Bank to impose a 20 per cent cut in the credit limits. The chairman of the Indian Jute Mills Association, Mr K. K. Bajoria, has said that the curbs will make it difficult for the mills to buy raw jute during the peak arrival period and, as a result, the growers may not be able to secure a fair price. About 33 lakh bales of raw jute are expected to arrive between September and December. It is, therefore, essential for the mills to have adequate funds at their disposal. Under the Tandon committee's norms, the jute mills can get 2½ months' credit for raw jute inventory and 1½ months' credit for finished goods and work-in-process. However, the actual bank credit available has been below these norms and the fresh restrictions will create more problems for the mills at a time when they have been experiencing acute shortage of funds as well as high costs of production due to the persistent and prolonged power cuts, disruption in the Calcutta port and other causes.

Mr Bajoria has revealed that most of the mills have been working with "negative working capital and negative net worth". Though they have been lately able to secure better prices for their exports, yet it will be wrong to conclude that their financial position has become so comfortable as to be able to afford a sharp cut in their credit. The West Bengal government's instructions to the jute industry to pay Puja bonus to workers at higher rates than the minimum are also expected to create more difficulties for the mills. The labour relations in the industry are yet to become normal after the last strike and it will be unfortunate if the credit restrictions create further complications.

The tea industry has also voiced its concern at the consequences of the Reserve Bank's decision. In a representation to the central Finance ministry, the president of the Tea Association of India, Mr N. L. Tantia, has cogently argued the case for sanctioning higher credit limits in view of the rising trends in production and exports as well as the sharp escalation in the costs of various inputs. Tea production in 1978 was 570.87 million kgs compared to 560.81 million kgs in 1977 and 512.44 million kgs in 1976. But the average unit price realisation in the Calcutta auction in 1978 was Rs 14.28 per kg against Rs 17.18 and Rs 13.38 in 1977 and 1976, respectively. The exports of tea from April to June in the current financial year were 43.2 million kgs compared to 27.0 million kgs in the similar months of 1978-79. As regards the cost of production, there has been a substantial increase in recent months of the prices of coal, diesel oil, petrol and pesticides.

The tea gardens are obliged to supply foodgrains at concessional rates which were fixed many years ago. In Assam, wages have increased from Rs 4 to Rs 6.14 per day in the last two years and in West Bengal from Rs 4.30 to Rs 6.30. Further, the wages are to be revised again in the near future. The rates of the state agricultural income-tax too have been enhanced in Assam and West Bengal. In these circumstances, the association has urged the ministry not to apply the credit curbs to the tea industry. Mr Tantia has clarified that the industry has been mainly dependent on bank finance and the credit has been utilised only for legitimate needs.

The chairman of the Association of the Indian Engineering Industry (Eastern Region), Mr R. C. Maheswari, has also strongly protested against the credit restrictions which have been imposed when the engineering industry has been passing through a critical situation arising from the severe shortage of power. He has pointed out that the curbs are likely to lead to the closure of many units. The West Bengal government's directive on the payment of bonus, it is feared, may cause a deterioration in industrial relations and result in higher costs of production.

On behalf of the government of West Bengal, the Finance minister, Dr Ashok Mitra, has drawn New Delhi's attention to the harmful consequences to the state's economy arising from the Reserve Bank's policy. He has said that it is likely to aggravate industrial sickness, apart from dislocating production and distribution. If the other state governments of the eastern region have not publicly protested, it has been probably due to the preoccupation of the ministries with the political developments. But the fact remains that, as a result of the scarcity of credit, industrial activity in the eastern region, which has been virtually stagnant for the last many years, will receive a setback with its adverse impact on employment and the living standards of the people.

On September 5, the Reserve Bank advised the commercial banks that it would have no objection to their granting additional credit to sick units, exporters and the borrowers falling under the other priority sectors, provided they were satisfied about their genuine needs. But why was not this advice incorporated in the Reserve Bank's directives issued in August?

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Window on the world

Havana summit: summing up

THAT THE Havana summit was educative cannot be disputed. Quite a few visiting delegates and their entourage succeeded in learning what *papaya* meant in Spanish although, in the process, they might have unwittingly caused embarrassment to the Cuban women in their company. What else it had achieved that was worthwhile in terms of the goals and needs of the non-aligned movement could however be debated. It no doubt had its moment of truth when it was faced with a Burmese challenge to define its objectives anew and reorganize itself in terms of those objectives, but it quickly shied away. The vested interests were only too happy to let sleeping dogs lie.

The truth is that the non-aligned movement is no longer what is was originally conceived or expected to be and this is why president Tito's was such a sad voice from the past. That the future, nevertheless, may not belong entirely to president Castro is probably a respectable point of view, but this only underlines the fact that the non-aligned movement has itself become a warring force. It is rather fortunate that it is also at war with itself since this limits its capacity for mischief.

It would be naive to deplore the Havana summit having brought out in all its nakedness the fact of the non-aligned movement having degenerated into a captive or creature of superpower politics. With Cuba as host country and president Castro as master of ceremonies, this conference could hardly have fared differently. It is quite true that there was resistance, not altogether ineffective, to the Cuban president's effort to align the non-aligned movement with the Soviet-led block of Communist countries. But there could be no mistaking the anti-American slant introduced into the main declaration as adopted at the conference.

This success could not have come so easily to president Castro had not US policies relating to the Arab-Israeli conflict and, in particular, the Camp David accord master-minded by president Carter provided so much of the Arab world with a grave provocation to get even with the White House on an occasion of international importance which the Havana summit was. If, even in these circumstances, the attempt to excommunicate Egypt with bell, book and candle was thwarted at least for the time being, it was only because the moderate forces still had some fight left in them. On Kampuchea, again, extremism was avoided and this was due to the fact that the conference was forced to adopt the only course that was really open to it. Since there is obviously no sovereign government in effective control of the country, Kampuchea's representation on the conference of non-aligned countries necessarily had to be kept in abeyance.

Excessive publicity was given by some of the Indian newsmen on duty at Havana to the so-called breakthrough effected on the economic front and the proposals for the grant of concessions in oil prices to the developing countries by members of the OPEC. While it is quite true that the OPEC countries had shown not only greater awareness of the needs of the oil-importing developing countries but also certain practical interest in doing something about easing the burden of rising oil prices on countries obviously unable to afford them, the practical details of a scheme of relief are yet to be worked out and even the resolution stating OPEC commitments in the most general terms was allowed to be crowded out of the agenda.

With so much to be modest about, the Indian delegation prudently kept a low profile. Having learnt a lesson at Lusaka, Indian's Foreign minister, Mr S.N. Mishra, was rightly interested in conducting himself as well as the affairs and activities of the delegation in such a manner that political foes back home might not find scope for raising controversies. Here he was reasonably successful, with the Indian delegation making its only conspicuous contribution to the summit by placing at the disposal of the conference internationally famous Indian expertise in draftmanship accumulated over all the years stretching back into the period of British rule.

UK's march towards oil self-sufficiency

WITH THE oil production of the United Kingdom from its North Sea sector exceeding the level of seven million tonnes in July—at 70,56,482 tonnes, it was higher by over 90,000 tonnes compared to the output in June—the current year may end up with a cumulative yield from this sector to as large an extent as 70/80 million tonnes. This has evoked, and quite legitimately, the optimism that Britain would be able to attain self-sufficiency in oil during the second half of the next year.

Technically, the UK is at present more than 85 per cent self-sufficient in oil. But this proportion, in effect, is somewhat higher as a proportion of the high-grade lowsulphur crude is exported and less expensive heavier crude is imported. Thus, larger imports are effected in exchange for smaller exports.

The cost of winning oil from the North Sea resources, of course, is sizeable. Between 1975 and 1978, the total investment in oil and gas production in the North Sea amounted to £ 8,800 million. Another £ 4,800 million are envisaged to be invested by the end of 1980. The total operating exploration and development costs last year alone aggregated to some £ 2,600 million.

But if the costs are high, so are the returns. The sales of North Sea oil in 1978 reached $ 2,800 million, while gas production was worth about $ 450 million in terms of actual contract prices and more than £ 2,000 million if valued at the cost of extra imports which would have been needed had these gas resources not been available.

The Secretary of State for Scotland, Mr George Younger, revealed a few days ago that Britain is to push ahead urgently with the expansion of oil production in its sector of the North Sea. The seventh round of licensing agreements on oil and gas exploration would be announced next year. In the meantime, the government is carrying out an expeditious review of the development of marginal oilfields. He promised to speed up the decision-making process.

The sixth round allocation of exploration licences announced earlier this year enabled 13 groups to begin searching for oil in the extreme north of the North Sea and off the Scottish east coast. A further licence was confirmed last month to the British National Oil Corporation and Shell.

The drilling programme of the first well under the sixth round of licensing has already been taken up some 65 miles north-east of Aberdeen. Sixteen mobile exploration rigs were operating in the newly and previously licensed area of the North Sea last month. There are at present 13 oilfields in production in the UK sector with another 11 in various stages of development. In addition, 60 further oil and gas condensate discoveries have been described as significant.

The increasing output of oil and gas in the North Sea has helped Britain a great deal in coming to enjoy a surplus balance of payments. This stage, of course, has also been reached following increased invisible earnings from shipping services, civil aviation, engineering consultancy services, etc. The last year's current account surplus of Britain, in fact, showed a marked improvement. The latest data suggest that it was over £ 1,032 million, as against the earlier estimate of £ 400 million. In the previous year this surplus amounted to only £ 293 million.

Power from tidal waves

The Korea Electric Company, a state-run organisation, is to set up three tidal power plants in Asan Bay, Karolim and Chunsoo Bay during the six years to 1988, having 450 MW, 330 MW and 450 MW rated generating capacity, respectively. These sites have been selected as the most promising out of the eight sites along the west coast in respect of which feasibility studies had been conducted recently at a cost of 1,265 million won.

The second stage, detailed feasibility studies about the above three sites are expected to be completed between October and December next year.

Global trade trends

A REPORT on international trade during 1978-79, released a few days ago by the Secretariat of the General Agreement on Tariffs and Trade (GATT) suggests that a new "element of uncertainty" has been added to the immediate prospects of global trade by the volatility of the exchange rates of several countries and the substantial spurt in the price of crude petroleum during the first half of 1979.

The value of world trade in 1978, the report says, amounted to about $1,300 billion—an increase of nearly 16 per cent over the 1977 figure, which was higher by 14 per cent than the 1976 value. The corresponding volume increase in world trade last year was nearly six per cent, as against 4.5 per cent in 1977. This rate of growth exceeded the growth in world production.

The volume of world trade in agricultural products is estimated to have expanded in 1978 by nearly eight per cent, while global exports of manufactures rose by about six per cent in volume, with mineral exports showing a marginal one per cent rise.

The growth in the value of world trade in 1978 continued to be caused more by the rise in dollar unit values than by the increase in volume. The depreciation of the US dollars in 1978 would have bloated the growth in the value of world trade.

While the share of manufactures in world exports amounted to 60 per cent in 1978 — up from 58 per cent in 1977—that of agricultural products declined marginally —to 16 per cent from 17 per cent. Dollar-unit-values of manufactures are estimated to have gone up by nearly 15 per cent in 1978, although in volume terms, the growth of world exports of manufactures hardly exceeded the previous year's figure. Exports of primary manufactures continued to rise during the first half of 1979.

The export prices of non-fuel primary products exported by developing countries fell by three per cent in 1978 due to a decline in the dollar prices of coffee, cocoa and tea. However, export prices of other primary products, which had been increasing during the last quarter of 1978, maintained their upward movement in the first half of 1979, mainly because of a further substantial rise in the prices of non-fuel primary products exported by developed market economies.

In industrial countries, the volume of exports and imports both expanded by about six per cent in 1978. Although the share of industrial countries in world exports rose in 1978 to 65 per cent, it remained below the 1973 peak of 68 per cent. Exports from the eastern trading bloc increased in value by about 14 per cent in 1978, leaving their share of world exports unchanged at 10 per cent. Though imports into the area rose by 19 per cent in value, roughly two-thirds of the rise was recorded by China's imports from industrial countries.

The volume and value of exports of the members of the OPEC fell slightly in 1978, while their imports indicated only a slight increase in volume. The share of OPEC members in world exports declined to 11 per cent in 1978 from 15 per cent in 1977.

In the non-OPEC developing countries, exports increased in value by 13 per cent in 1978. Yet their share of world exports remained close to 13 per cent. The imports of these countries increased in value by 17 per cent with a strong increase in volume too. The combined currrent account deficit of this group of countries increased by $10 billion in 1978 to $31 billion, presumably due to deterioration in their terms of trade.

The share of developing countries in the total imports of manufactures by the industrial countries increased slightly to nine per cent. The increase in these imports in 1978 was the fastest in such products as engineering goods, which are subject to fewer quantitative restrictions and in which tariffs have been gradually lowered in the last two decades. In the case of engineering products, the value of imports by the developed countries from the developing countries increased by 24 per cent in 1977 and 37 per cent in 1978.

Expanding role of ADB

THE ASIAN Development Bank has assumed a progressively effective role in promoting the economic and social development of the region. As a regional development financial institution, the bank has been befitting the area with its modest resources. It has endeavoured over the years to establish a relationship with the developing countries in Asia based on mutual repport and progressively strengthened its ability to respond promptly to their changing needs and circumstances.

It was during 1978 that the Asian Development Bank's lending exceeded $1,000 million. Technical assistance approvals also recorded a sharp increase to $11.1 million. The bank recorded substantial progress in a number of fields. It made its first loans in the health sector and also its first public offering of an external yen bond issue on the international capital markets. The year 1978 also saw the successful conclusion of efforts to replenish the Asian Development Fund (ADF), the bank's soft loan window, on a larger and longer term basis than in the past.

The total loan approvals during the year reached $1,159 million, nearby 31 per cent more than in 1977. Cumulative lending reached $5,404 million—for 359 projects in 23 developing member countries. As many as 53 loans were approved during the year which was also a new record. Nearly one-third of loan commitments were made to the poorer member countries on concessional terms.

In line with the trend in the recent years, agriculture and agro-industries accounted for the largest share in the bank's lending during 1978. It is significant that the bank's assistance in this sector, provided on concessional terms to the poorer nations, also recorded a substantial increase. For instance, special fund

Eastern Economist 30 Years Ago

SEPTEMBER 16, 1949

A Rose by any other name is supposed to smell as sweet. And there is no ground for supposing that a crisis, called by any other name, will look less bad. And yet there has been over the last three months, a desperate attempt to hide the fact that our economic affairs are in crisis. About three months ago the Commerce Minister, in a statement designed to allay disquiet, only succeeded, by stirring the embers of his opponents, in adding to the fire. Last week, both before and after his vital trip to Bombay to disentangle textile affairs there, the minister for Industry and Supply was vehementaly denying crisis in the textile industry. This was done on two arguments. In the first place he is reported to have said, "I can assure you that there is nothing like a crisis threatening the textile industry. Thirteen mills have closed one shift and one mill has closed two shifts. Seventeen mills have given notice of complete closure. Ten mills propose to close one shift. Two mills which had closed down have re-opened; five mills which had wanted to observe partial closure have withdrawn their notices." Apparently nothing short of complete liquidation wiil constitute a serious crisis in this rendering of the case. In the second place—if newspaper reports are accurate—he seems to have argued, "There is nowhere in India a complaint that cloth is not available. Rather, there is a complaint that cloth is being sold in some areas below the ceiling prices. This itself is an indication that there is no crisis in the industry." Of the two arguments possibly all that need be said is that the second argument is a little less respectable than the first.

loans were higher by 31.1 per cent over the 1977 level.

Since agriculture, including forestry, fisheries and livestock, represents the largest single source of employment and accounts for almost half of the GNP and export earnings of most of the developing member countries in the region, the bank has been giving high priority to its activities in this key sector. Loan approvals in 1978 amounted to $310.7 million, as against $259.7 million in 1977, raising the total lending to this sector by the end of 1978 to $1,360 million.

sharp rise

The total bank lending to the industrial sector recorded a sharp increase from $137.6 million in 1977 to $282.1 million, bringing the cumulative lending to the end of 1978 to $1,192.2 million. Loans to the industrial sector cover direct finance by the Bank for Industrial Development and funds channelled through national development banks, primarily to assist small and medium-scale enterprises. Sub-loans from bank credit-lines have been supporting a wide variety of these smaller industries, thus helping to create additional employment and technical skills and promote investment of domestic and foreign private capital in such productive enterprises.

While the bulk of the bank's support for industrial development in the past had been in the form of credit lines to national development banks, a very encouraging development of 1978 has been a three-fold increase in direct lending to industry in 1978—from $42.6 million in the previous year to $124.6 million. The substantial increase was indicative of a wide variety of industrial projects available for direct financing and the bank's growing attention to projects which would help expand the supply of essential commodites and promote industrial research activities. Loans for the development of power totalling $249.2 million were made in 1978, bringing the cumulative lending to this sector to $1,243.6 million. The major objectives of bank's financing in this sector have been to ensure improved utilisation of existing capacities and development of new facilities based on indigenous energy resources.

For transport and communications, loans totalling $138.1 million were sanctioned during the year, so that cumulative lending to this sector reached $941.8 million. A major part of bank's lending to this sector has been for roads, ports and airports. Most bank loans for road networks are aimed at facilitating area development and reduction in regional economic disparties.

Loans totalling $94.1 million were offered during the year for water supply projects. Total lending to the sector by the end of the year had reached $512.5 million. Development of piped water and sewerage facilities is essential not only to industry and commerce in urban areas, but perhaps even more to the health and well-being of the fast-growing population in the region. Several projects in this field devote special attention to low income groups, through extension of distribution networks.

Nuclear plant licensing : US lifts ban

The US Nuclear Regulatory Commission (NRC) has decided to lift its ban on processing applications for construction permits and new operating licences for nuclear power plants, an action that was suspended following the Three Mile Island, Pennsylvania, nuclear accident in March this year.

At a meeting on September 6, the NRC said it would take over from staff members the final review of all new construction and operating licences. The commissioners, of course, agreed that no new licences will be issued until after the presidential commission investigating the Three Mile Island accident makes its final report by October 25.

Thailand's tin mining

THAILAND IS gradually regaining its lost position in tin exports. The country had witnessed a fall in the output of this metal during the last few years which led to its exports going down. The lowest level was reached in 1975 when production fell to 16,406 tonnes—nearly 32 per cent less than the 1968 peak. The subsequent recovery, which took the output to 30,186 tonnes in 1978, has partly been generated by the high prices of the last two and a half years. This has encouraged offshore operations which contributed 15,000 tonnes of metal last year. In 1978, Indonesia, with an output of 27,366 tonnes, was pushed down to the third place, while Bolivia was only 700 tonnes ahead of Thailand. During 1979, Thailand, with its expanding output, may overtake Bolivia too.

There are, however, serious doubts that Thailand's production may not be sustained long because a large part of the offshore output comes from shallow areas mined along Thailand's west coast. The operating vessels are little more than small fishing boats converted into suction dredgers. These boats, working only up to three kilometres into the Andaman Sea are picking the best deposits. Moreover, the leases obtained by the boat owners are blocking systematic exploitation by larger operators, who alone can ensure a lasting and steady output.

About a third of the boats operating on the coast are thought to be working illegally. A good deal of the tin mined by these boats is smuggled to Singapore for smelting. It has been estimated that the illegal outflow in 1978 was around 3,000 tonnes or almost 10 per cent of last year's output. Boat miners seem to be assured of the local support, and official curbs are largely ineffective. When the government tried to take strong measures, there was an outcry that it was squeezing the small men in the interests of the rapacious foreign countries. Such pressures, in 1975 forced the civilian government in power to revoke the offshore mining lease of the Thailand Exploration and Mining Organisation, a joint venture of Union Carbide and Royal Dutch Shell.

Bethelhem Steel and its associates decided not to take up a production-sharing contract last year because the area offered to them was considered to be too small. However, Shell has decided to work in Thailand, on a production-sharing basis with the offshore mining organisation set up by the government in 1975. The organisation is negotiating with others and plans to operate on its own as well when the dredger it has on order is ready.

MOVING FINGER

Mr Chandra Shekhar need not have delved into the past of Mr Sanjiva Reddy in order to collect evidence that this politician-president is no better than he should be. Given his talkativeness Mr Reddy can safely be depended upon to convict himself out of his own mouth. By saying that in annoucing the dissolution of Lok Sabha without exploring the possibility of a stable government being formed by Mr Jagjivan Ram, he had been guided by his conscience, Mr Reddy has exposed himself to ridicule. The adherence by the president to the letter and the spirit of the Constitution is not a matter between his conscience and himself but the duty of a servant of the state (described as 'Head of State' purely for ceremonial purposes) who has to satisfy considerations of legality and public policy. Mr Reddy has taken a vow not to speak on controversial matters untill after the polls. For his own sake he should have started practising this self-denial somewhat earlier.

In fairness to the president, however, it must be conceded that he is not the only grey eminence in public life who has chosen to wear his conscience on sleeve. Mr Morarji Desai, for instance, still seems to be consulting his conscience about contesting the poll. At any rate we have had no formal announcement from him that he will not be a candidate. The last word we had from him was that, although terrific pressure was being brought to bear on him to seek reelection to Lok Sabha, he would act only according to the dictates of his conscience. However, whoever may be trying to persuade Mr Desai to enter the election fray, it cannot be Mr Chandra Shekhar or Mr Jagjivan Ram. The president of the Janata party, in fact, has taken it upon himself to announce that Mr Desai will not be contesting the election. Again, the public has also been told that the Janata party is agreed on Mr Jagjivan Ram being made the prime minister in the event of the party heading a government after the poll. The implication is that the Janata leadership will be very happy indeed if Mr Desai does not embarrass it by offering himself as a candidate. Mr Jagjivan Ram, I presume, would like to hear more about Mr Desai's plans to dedicate himself to the practice of ethical journalism under the umbrella of a trust which will no doubt be well-endowed with money and other worldly goods. The trust, it is indicated, will publish a weekly featuring Mr Desai as its star columnist. This weekly is to be called "Value". May I suggest that "Values" may be a more appropriate title? The projected periodical should be saved from being mistaken for a market guide.

Although various political parties may still be drawing their battle lines, *The Times of India* seems to have finalised its alignment. In its issue of September 8, while featuring the Gupta report on the "Maruti affair" as a lead story, it gave prominence, also on the front page, to Mrs Gandi's speech at Tirupati charging Janata rule with ruining the economy. Again, editorial although its sub editorial for the day—a double-column affair—was hung on the peg of the Gupta report, it referred only peripherally to the outrageous abuses of their positions by the then prime minister and her son, with the latter exercising, in the words of the Commission, "derivative authority". The editorial, in the main, was employed to blast Mr Chandra Shekhar for forcing the hands of the government to release the Gupta report by himself giving publicity to its contents. It took him to task for seeking to make electioneering fodder of the report, which was a ridiculous charge to make, seeing that the Janata party president had himself declared categorically that his precise purpose in bringing the report into the open was to impress on the electorate that the emergency excesses and abuse of authority were very much of a live issue in the Janata party's compaign against the possible return of authoritarianism to the seat of power.

Claiming that Mrs Gandhi herself had never used against her political foes dossiers which should be available to her, *The Times of India* editorial sermonises that Mr Chandra Shekhar and his party should "fight it straight" and not play it dirty. The newspaper, in fact, demands that the parties opposed to Mrs Gandhi should fight on the ground of her choosing. Its soft corner for a reckless ruler who did not hesitate to commit the whole lot of her political opponents to detention without trial tells its own story and its bonafides are not improved by the amazing statement that "she has not harassed her political foes as some of them have harassed her".

Returning to the subject in a less formal manner in its "Delhi diary", on September 10, *The Times of India* makes the strange complaint that the release of the Gupta report by Mr Chandra Shekhar was not merely unauthorised but was in fact unlawful. I should have thought that newspapers should be the last to question publicity being given to documents of public importance, on the ground that the documents in question had not been obtained according to government rules and procedures. I do not for a moment grant that Mr Chandra Shekar has done anything illegal, but even if he has done so, the press should surely not protest or criticise since its own claim to the freedom of the Fourth Estate rests on its ability and willingness to publish all the news that is fit to print. As a matter of fact, the press should be humble about its failure to unearth the Gupta report on its own. *The Times of India* hopefully says that "in the circumstances in which it came to be released, the main sufferer seems to be the Janata party." This seems to be a case of the wish being father to the thought.

VB

Special feature

A look at UNCSTD

The developing nations, clamouring for transfer of technical know-how to them by the developed countries on reasonable terms, had come to entertain significant expectations from the United Nations Conference on Science and Technology for Development (UNCSTD), held in Vienna from August 20 to 31. How far have their hopes been fulfilled ?

In this article, W.S. Titus has a look at the deliberations of this conference and expresses the view that against the backdrop of the massive advance publicity made and the impressive agenda offered, this international event has turned out to be a colossal flop. The voluntary contributions announced by the developed countries, and that too by only a few amongst them, for raising an interim fund for assisting the development of science and technology in the Third World for a two-year period, aggregated to just $250 million, whereas the developing countries had pleaded for a billion dollars interim fund and the establishment of a two billion dollars servicing fund for global programmes to rectify the ills of the developing nations during the next six years, with more funds flowing in for this purpose in the subsequent five years.

Noting that the application of science and technology to production in all fields is of crucial importance, Titus reaches the conclusion that the vested interests hold on to the fruits of science and anybody who wants to share these fruits has to pay a price. He stresses that when we talk about distribution of wealth, we cannot ignore the importance of transferring technical know-how. At the Vienna conference, the scientific community, he points out, lost an opportunity to address itself to solving the problems of the less fortunate nations and societies.

Titus also dwells in this piece upon the failures of scientific breakthroughs in this country. He attributes these failures primarily to lack of political will and administrative direction. The experience of the scientific community in India during the last few years, he opines, has been traumatic. The situation has worsened in the present political instability. It obviously needs to be rectified expeditiously, especially when there is a large reservoir of scientific and technical manpower available. The industries that produce the primary goods for social consumption and building materials and inputs of progress too have to be keyed up, he stresses.

THE UNITED Nations Conference on Science and Technology for Development (UNCSTD), held in Vienna from August 20 to 31, painfully delivered mighty little. Coming at a crucial period of history of human society, when established systems of economy are being jolted and the very orientations of technology are being challenged, there had been expectations in the thinking quarters of the world that the conference might throw light on the directions in which application of science could be fostered at least during the decade about to dawn. Caught up in narrow national and group considerations, the UNCSTD affair was made into a "technomatic" (the coinage stands for technological diplomats) formality. It was a grand ball indeed—Waltzing Vienna style all the way—one, two three; one, two three; one, two three; and back to square one. Those who knew their steps, the combinations and variations, made an impression. As the First World "technomats" and their Second World counterparts made it a competition, the Third World debutants froze into inhibitions, making polite talk, with hopeful expectations that the most eligible would guide them on the floor of fulfilment.

Yes, indeed, it was a bad show, completely out of tune with the times in which it was staged. It was not supposed to be a charity scientific ball to show the hat around to produce an interim fund. In view of the massive advance publicity made and the impressive agenda offered, this international event turned out to be a colossal flop.

After the failure of several other global conferences in recent times towards sharing the endowments of the world by the rich and the poor nations, particularly the UNCTAD—V, the Vienna doings of the newly established UNCSTD have almost left the present generation with the grim realisation that the economic and technological gaps between the three world segments—fondly called, First, Second and Third—are in fact widening. The global will to bridge the cleavage is totally lacking.

It is high time that certain brutal facts are expressed. The First and the Second worlds are plagued with technologies which are obsolete; so that, when some of the energy plugs are pulled, because of the depletion of vital natural resources, the jolts are going to be pretty shocking. Let it not be forgotten that technology inputs and reorientation of research and development are not only important for the modernisation of less-developed societies, but also for the orderly transition of the developed ones to move on to the next stage of human progress.

It appears to have been a sad spectacle in that the hat had to go around for an interim fund to assist development of science and technology in the Third World for a two-year period. The voluntary contributions amounted to a "massive" amount of 250 million dollars. This might sound impressive to some "technomats". But, in view of the relative meagre suggestion made by the Group of 77 (developing countries) for a billion dollars interim fund and the establishment of a two billion dollars servicing fund for global programmes to correct the ills of the hitherto application of science and technology and to reorient techno-economic systems of development during the years between 1981 and 1985, with a provision for doubling of it in the second half of the next decade, the Vienna commitment is indisputably niggardly.

Even this insignificant "kitty" of an interim fund is mainly contributed by a handful of advanced nations —nearly 25 per cent committed by the United States and bulk of the rest coming from the ever-generous Canada, Australia and the Nordic countries. The affluents, like West Germany, Japan and Britain, put their foot down refusing to participate. The Soviet Union and the East European block obviously did not find their interests served in a generously pooled global dispensation.

The purpose of this article is not to propagate the virtue of international begging bowl for assisting human development, whether it is in the name of economic assistance or technological cooperation. While it is fully realised that no segment of the world — First, Second or Third—can afford to isolate itself entirely, the reckoning is clear that a global consensus on economic and technological consensus on the total development of the human family is far from obtaining in a world divided by power groupings and ideological deviations. **The meek are far from inheriting the scientific and technological fall-outs that have the promise of welfare.**

The Vienna doings of the newly established UNCSTD have almost left the present generation with the grim realisation that the economic and technological gaps between the three world segments—fondly called, First, Second and Third—are in fact widening. The global will to bridge the cleavage is totally lacking.

It ought to be said without mincing words that the "technocrats" and the "technomats"—the professional mutations as they are—together with the various vested interest protectors of the non-scientific breed failed to listen to the voice of wisdom from the **UN Secretary-General, Dr Kurt Waldheim, who pleaded that science and technology should not be used for destructive purposes and wasteful consumerism.** The seeds of collective wisdom of humanity might have fallen on the rocks of destruction and deserts of wasteful consumerism, but the virgin soils of the developing societies ought to nurture them. That is where the possibilities of a new economic order and scientific import lie—the promise of a post-fuel-crisis society.

Then, only pipe-dreamers would have the phantasies that man uses his tools only for what is called constructively productive purposes. We are in a world of hard realities. The spectacularly material developments visibie today are products of advances in scientific knowledge and technological innovations in almost all areas of human activity. However, in the twentieth century, science and technology happened to have had massive financial backings by governments and corporate conglomerates. **Hence the vested interests hold on to the fruits of science. And, it now seems that if anybody wants to "share" the fruits of science, they ought to pay a price.**

The urgency to apply technology in the developing world for socio-economic uplift emerges because about 3,000 million people—75 per cent of the world's population—live there and account for only one-fifth of the world's income. It is a historic fact that the enormous wealth and power of the developed world has been brought about through the application of science and technology in industry, agriculture and almost all other walks of life. **Therefore, when we talk about distribution of wealth, we cannot ignore the importance of transferring technical know-how, the very key to progress.**

The grim reality in the world today is that out of its 4,000 million inhabitants, about 600 million suffer from acute malnutrition, 800 million are illiterate, above 1,000 million have no proper housing and 1,500 million have no access to effective medical care. If we review the deliberations of UNCSTD, we are sadly disappointed that no meaningful decisions have been taken towards solving the human tragedy stemming out of the abject poverty afflicting hundreds of millions of the world's population. **At the Vienna conference, the scienti-**

fic community lost an opportunity to address itself towards solving the problems of the less fortunate nations and societies. Knowing fully well that science offers the tools of modernisation and economic problems, the rhetorics at the conference only attempted to paper over the blot on the collective human conference.

Now that the Indian delegation has returned with very little to report back, the focus should be on the status of science and technology at home. As the world's tenth largest industrial power, and possessing the globe's third largest scientific manpower, the question repeatedly asked is as to why the national endowments are not harnessed to effect a better quality of life for the masses. The failure is undoubtedly due to the lack of political will and administrative direction.

With a varied industrial infrastructure, which is envied by most of the newly affluent societies, and chains of research facilities covering almost all disciplines of science and technology, together with a talented manpower, India has not made the kind of strides it should have. **The gross shortcomings are as a result of the inability of the administrative and political institutions to pragmatically and imaginatively package the systems of development with appropriate technological content.** The networks of laboratories, particularly in the industrial area, have yet not made any spectacular mark in the productive spectrum. Our medical research has fallen short of solving the problems of population explosion, malnutrition that cripples society and controlling diseases that afflict millions. The efforts of agricultural scientists have, nevertheless, made far reaching impacts, and continue to do so. With proper management of research and transfer systems of technology, the country is bound to make major strides in modernising its economy and social welfare. However, with the kind of political instability that is obtaining in the country and the mounting economic strains, only mirages are visible at this juncture.

The experience of the scientific community during the last few years had been traumatic. The policy decisions, or lack of it, the purile statements and pious pontification of the political helmsmen, along with the multi-lane inroads made by bureaucrats in the scientific domain, have all amounted to expressions of anti-science in the immediate past. In such a climate of political confusion and intellectual obscurantism, scientific development has got a humiliating setback.

India's industrial infrastructures and scientific base were created by men of vision and purposeful dynamism. That now lacking at the helms of national affairs, all that the society of scientists and industrial community are doing is to keep their fingers crossed for the emergence of a stable and dynamic political leadership.

The changing patterns of energy utilisation, necessitated by the depleting global oil resources, call for major reorientation in research and development in a wide range of scientific applications. India, as a low-energy consuming society and endowed with industrial infrastructural diversities and technical manpower, is in a position to take up challenges of creating new productive and consumer patterns. It is here that the issue of appropriate modernisation arises.

Then, India can straight away apply the very frontier technologies in the fields of communication, mass transport, electronic media development for entertainment and education for the multitudes of people, public health and medicine, population control and nutrition, environmental improvements and ecological control and many other vital areas. While all these are theoretically possible and practically demonstrable, policy-makers twiddle their thumbs while changing the old **mantras** of financial restraints and administrative constraints. It is here that the genius of the technocrats ought to find expressions of initiative and improvisation. Appropriate input of available resources and motivation of the human will alone can tackle the problems of social transformation in a country like India, with human density. It is to this call that the scientific community should address itself.

But a society cannot progress with scientific will alone even in a climate of political stability. The industries that produce the primary goods for social consumption and building materials and inputs of progress would have to be keyed up. The technology input in these areas would require decisions of priority. In all areas of development, no nation today could be totally self-reliant. But technology imports to bridge gaps cannot be a chronic habit. Unless the imported technologies are adapted to local genius and conditions, and constantly updated, the gaps are bound to widen whereas they should narrow. India should realise that in this world of fast changing technologies, the habit of repeated buying of the same know-how or with marginal modifications cannot be indulged in. A review of our technology import policy is bound to open the eyes of not only the administrators, but also of the users of know-how and consumers of goods and services.

It is globally recognised that India is in a unique position to offer technologies appropriate for developing societies. However, if India has failed to make an impact to the extent it should have in the imparting of know-how, it is mainly because of failures in domestic applications for a socio-economic thrust. When India's performance improves in this respect, its voice will be heard at deliberations like the UNCSTD.

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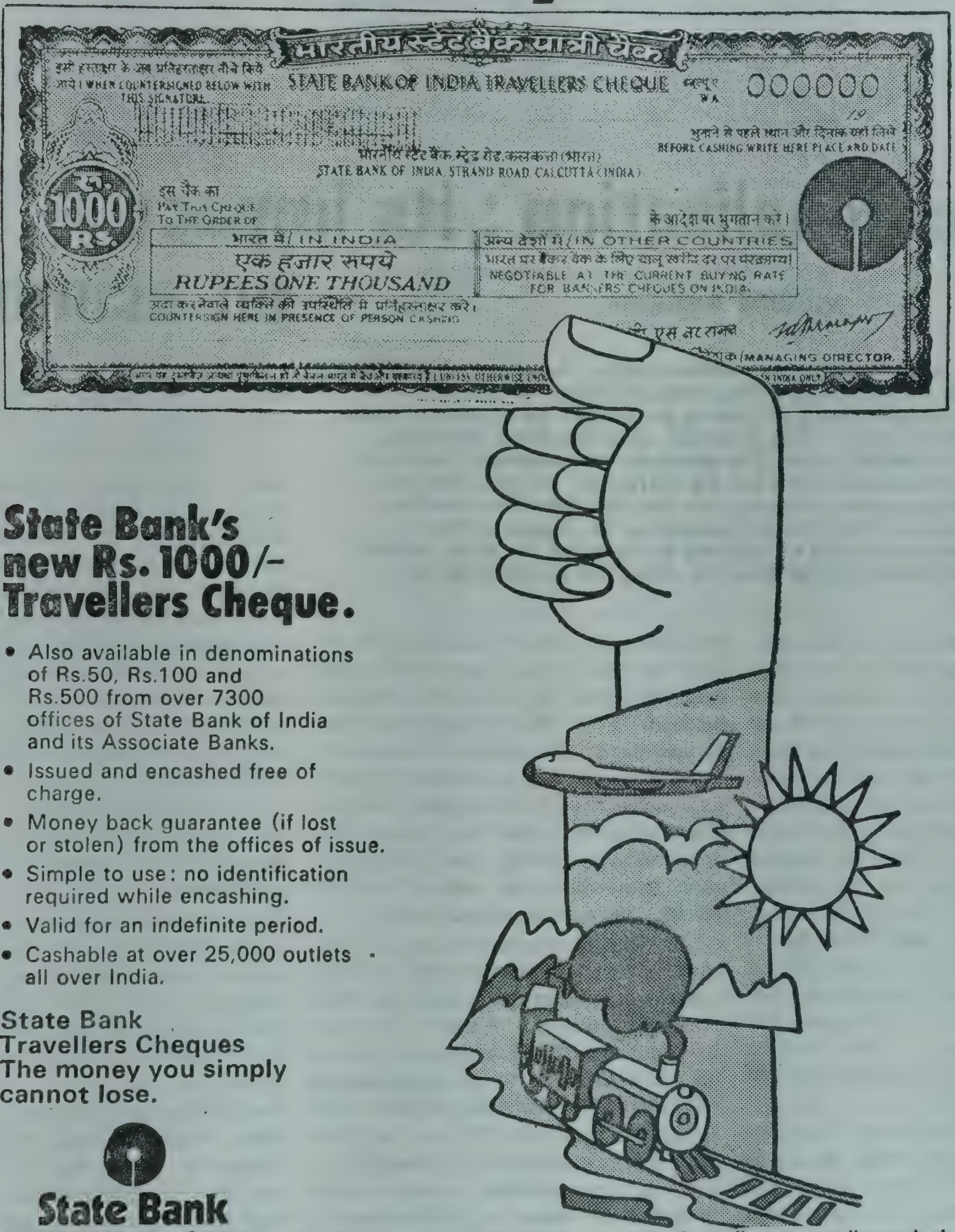
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Coal nationalisation : its impact on economy

Virendra Agarwala

The recurrent coal crisis is indisputably having widespread repurcussions on the economy. The nationalisation of this industry has not had the desired result of raising production on a steady basis and at the minimum cost. The industry also has been incurring large losses in the recent years. The position has worsened because of inadequate movement of coal by railways. In this article, Virendra Agarwala makes a strong plea for the denationalisation of the coal industry. If that is not possible, he suggests that private entrepreneurs should he allowed to operate in areas where the public sector undertakings have no plans for production for years to come.

IDEOLOGY HAS ruined India's economy. Those power hungry politicians who claim to be progressive consider that nationalisation is the panacea for all our economic ailments. The experience, however, has shown that the nationalisation of coal, banks and insurance companies has done more harm than good to the national economy. President Sanjiva Reddy recently asserted that the nationalisation of the coal industry was done in a hurry with inflated employment figures and this has resulted in the country losing hundreds of crores of rupees every year. He has called for an early unpleasant but necessary drastic action in this industry. It is obvious that coal crisis has paralysed the national economy.

The production schedules of the industrial sector all over the country have been thrown out of gear following the serious short supply of coal. The shortage has assumed such proportions that even export orders of some major units have been hit hard. Due to inadequate movement of coal by rail, some units havs even attempted to move their requirements by road. But as this method has its limitations, the shortfalls became so heavy that quite a large number of units had no choice but to down their shutters. The industrial sector has urged the government to allocate coal and wagons at a reasonable level with a view to meeting their growing requirements.

For the past nine months or so, not a single steel plant has worked normally because of the shortage of coal. In fact, the steel industry was forced to cut back its production target last year by nearly six per cent owing to the inadequacy of coal supplies. The stock of coal with steel plants in April, 1979, was only 1.44 lakh tonnes (equivalent to three and a half days' consumption) as against the normal requirements of 500,000 tonnes. It is a sad commentary on the working of Coal India that the country was obliged to go in for the import of as much as one million tonnes of coking coal last year.

The inadequate supplies of coal have also hit the cement industry in which about 13 units have been forced to close down partially. The other key industries such as cotton textiles, fertilisers and chemicals too have been compelled to reduce their output because of insufficient coal supplies. During the first three months of 1979; the production of cement declined by three per cent and that of cotton fabrics by 3.5 per cent as compared to the corresponding period in 1978. The emergence of coal crisis is a result of our faulty planning. There is no coordination between Coal India, the railways, the ministry of Industry and the state governments.

Coal shortages have hit power output so severely that the numerous large, medium and small industries have been struggling to keep their operations going. Maharashtra, Gujarat, Uttar Pradesh and Tamil Nadu have had to impose power cuts ranging for 15 to 50 per cent. During January last, one power unit in Delhi remained closed for 29 days and four units in UP had to remain shut for three days for want of coal. If the coal industry fails to meet the requirements of our power houses even at the present level of their generation, the future is quite depressing in view of the fact that the coal requirements for power generation are likely to rise from about 36 million tonnes today to 55 million tonnes three years hence. Our thermal power plants will require over a hundred million tonnes of coal in 1987-88. It is against this background that increase in coal production has to be accorded the highest priority.

Who is responsible for the coal crisis ? The industry has repeatedly claimed enough stocks at the pitheads and has taken the stand that consumers are experiencing hardships because of the inability of railways to supply the indented number of wagons daily. The railway administration has been shaken up recently because it could not streamline its operations to meet the critical situation. The railways are the principal carriers of coal responsible as they are for the movement of over 72 per cent of the coal availability. The dependence of the coal industry and its consumers on the railways, therefore, is obvious.

wagon shortages

It is equally evident that either of them can expose the other at a given point of time. The railways must meet the wagon requirements, but they do not many times have the matching availability of coal at pitheads and rail-heads. The coal industry must be fully geared to produce according to the set targets and should have more than normal stocks at pitheads and must organise loadings according to schedule. Yet it may be hamstrung sometimes by shortages of wagons. Save occasionally, when coal and wagon availability is at an appropriate matching level, the game of one exposing the other by turns goes on and perhaps the country has learnt to live with it. Against the backdrop of this stark reality, it is worthwhile attempting an assessment of the grievances of the two agencies against each other.

The prime concern of the railways is to optimise the use of the available wagon fleet. Moreover, certain types of wagons, particularly CBC fitted ones—box wagons, can be moved only in trains units. If 'train' units falling short of optimum capacity of locomotives are run, there is invariably a huge loss of transport capacity, a situation the railways just cannot afford. The coal industry is aggrieved because under the railway rules, it is to subjected to double penalty for its failure to load even a small number of wagons comprising a rake. Apart from treating the entire rack as left behind and therefore detained, as a result of which collieries incur demmurage, the railways either cancel or reduce allotment of wagon rakes for the following days. The railways are not prepared to treat this as double penalty. The demmurage is for detention of wagons and the other action—cancellation or reduction of allotment for the following days—is forced by undue detention of wagons.

coordinating agency

The coal industry, on the other hand, would like the railways to accept its intents for short rakes, say of 20 boxes, for some up-country destinations. The railways generally are not inclined to accept this demand. What we urgently need today is that the representatives of Coal India and railways should develop some co-ordinating agency at the national as well as at the local levels so that some policy matters as well as the day-to-day questions can be resolved amicably. This is absolutely essential so that coal could reach the power plants and other industrial units not only well in time but also at the minimum cost. Once this is achieved, the industrial growth rate is sure to get accelerated.

The cumulative losses of Coal India up to April this year have been estimated at Rs 450 crores. Its capital outlay is Rs 1,113 crores, comprising Rs 431 crores worth loans and Rs 682 equity. A target of 118 million tonnes production has been set for this year, but production prospects have become uncertain in view of the difficulties expected about securing inputs such as power, diesel oil, cement and explosives in adequate quantities. The actual output would not exceed 102 million tonnes.

With a view to obviating losses of the industry, coal prices have been raised fairly steeply a few weeks ago to net an additional sum of Rs 350/380 crores in a year. While there can be no dispute about these prices being fixed on an economic basis, for otherwise the losses have to be met by the government through higher taxation in general or increased deficit financing, there is widespread apprehension that the coal industry is burdened with excessive work-force, which situation needs to be rectified. The hike in prices allowed, therefore, is bound to have undue cost-push impact on the economy.

crucial question

How to ease the coal famine is the most crucial question facing the nation today. It will not be an exaggeration to suggest that the transformation from a surplus stage to a deficit one has taken place largely because trade union leaders, constractors, gangsters, local political leaders and corrupt officials have all conspired to make large production schemes partly infructuous. Coal shortages have been deliberately created to generate black money without any concern for the movement of railway wagons or production of steel and other industrial commodities. It has been estimated that 'legitimately' contractors rake up Rs 75 crores a year from the coal industry in the West Bengal-Bihar area alone and the total black money generation is around Rs 250 crores a year mostly through coal transported by road. It is feared that black money generation from coal will increase to Rs 450 crores a year by the end of the current plan. Railways also cannot escape responsibility for black money generation in the coal industry as wagon allocations have been inadequate.

What we urgently need is to increase coal output to 110 million tonnes this year and decrease pitheads stocks to about six million tonnes so that the coal supplies to the consumers can approximate the requirements. But would the Railways Board allot sufficient number of wagons?

This will not only call for a large measure of administrative efficiency but also for political courage to deal with gangsters and hoodlums of the coal belt as well as officials of production units with a heavy hand. We have reached a crucial stage in our national history that all efforts mast be made because the coal famine will not only ruin the national economy to a point where inflation, violence in industrial relations, production, disruptions and shortages of essential goods would begin to generate massive socio-economic tensions.

Is denationalisation necessary not only to avert the coal crisis but also to place the coal industry on a sound footing? It may look to be a far-fetched idea, but the United Kingdom found it necessary to denationalise its coal industry when it discovered that the people could hardly be asked to pay for the inefficient and corrupt functioning of the nationalised sector. How long can the Indian people be persuaded to meet such huge losses just for the reason that coal nationalisation has reasonably failed to produce the desired results. This sort of economic system can neither eradicate poverty nor create large employment potential to which we as a people are committed to. Coal is the primary source of energy, therefore, we as a nation must make all possible efforts to maximise its production at a minimum cost.

Should it be difficult to denationalise the coal industry, then at least we must immediately explore the possibilities of allowing the private miners to operate in such areas where the nationalised undertakings have no production plans for years to come. We are wedded to the concept of mixed economy. There is, therefore, no reason why this proposal should not be given a fair trial. Some competition between the private and the public sector operators can certainly place the coal industry on a sound footing. It will not only resolve the coal crisis but also ensure qualitative goods at a minimum cost.

Monetarist vs Structuralist controversy in Indian context

Dr. S. K. Awasthi

A bitter centroversy has been raging between the 'Monetarist' and the 'Structuralist' groups in the inflation-ridden Latin America. The author who is connected with the Economics department of Allahabad University has analysed the controversy in Indian context and has come to the conclusion that structural theory may not be sufficient explanation of inflationary price rise in this country.

MONETARIST VIEWS are close to those imputed to the International Monetary Fund (IMF), even though several of them dissent from the IMF in many respects. The Structuralists, on the other hand, claim to have support for their views in the studies of the Economic Commission of Latin America, "even though official ECLA reports do not show the fatalistic view of the inflationary process in Latin America nor the degree of scepticism towards monetary and fiscal policies that is implied in the structuralist view.

The monetarist view that: (a) Inflation has ceased to promote economic development and has in fact become incompatible with it. Even the countries that managed to have inflation and development in the past are now facing an acceleration of inflation and a deceleration of development; (b) Inflation must be stopped quickly, before it becomes explosive. The only effective method seems to be curbing of excess demand through a proper combination of monetary and fiscal policies supplemented by international financial assistance; (c) Most of the alleged supply inelasticities and bottlenecks are not autonomous or structural, but are caused by price and exchange rate distortions generated during the course of the inflationary process itself.

The structuralist, on the other hand, hold that: (a) Inflation is a natural accompaniment of growth; (b) Inflation cannot be curbed through monetary and fiscal means without at the same time provoking unemployment or stagnation of growth because of supply rigidities; (c) The instability in export preceeds generating a 'capacity-to-import' bottleneck as well as supply inelasticities inherent in the growth process, renders it impossible to curb inflation in the short run. "It, in fact, renders desirable a gradual attack on inflation except to the extent that foreign assistance becomes available to render the supply of imports more elastic."[1]

The divergence in both these views is, in fact, more of method and emphasis than of substance. There is a hard core of dispute which centres mainly on the usefulness of monetary and fiscal policy as well as on the relationship between structural factors and the inflationary process itself. An assumption of the structuralist views is that a sharp distinction exists between the inflationary behaviour and policies of less developed countries taken as a group, on the one side, and the developed countries as a group on the other; and accordingly a separate theory is needed to explain such changed and different behaviour. In fact, this approach tends to over-estimate differences between the two groups and ignore differences within the groups. For example, within the less developed group Brazil followed expansionist monetary policies and suffered from acute inflation. Mexico pursued a more conservative policy—monetary as well as fiscal—and had only a moderate rate of inflation. Within the industrialised nations, France, until recently followed inflationary monetary policies while West Germany adhered to a conservative approach.

The controversy creates two questions. The first is, "Is a new or modified theory of inflation, emphasising supply inelasticities or bottleneck factors which are judged to be inadequately covered by the 'demand-pull' or 'cost push' theory, in fact needed for the understanding of inflation in Latin America?" The second is, "Is there room for a 'Structural' theory of inflation, which would regard changes in money supply as merely passive adjustments to irresistible autonomous pressures generated by bottlenecks in the import capacity, or inelastic food supplies or institutional arrangements?[2]

A few points are undoubtedly standing out:

(a) In the heavy inflation ridden countries the rate of expansion in the money supply has been of such order of magnitude (20 to 30 per cent per year) as to outstrip any realistic possibility of growth of the money supply. At that rate of monetary expansion no economy, even though highly developed and even exempted from major inelasticity of supply bottlenecks, would fail to have inflation.

(b) No clear cut relationship appears to exist between the rate of inflation and the rate of development. If there is any correlation, it is negative. The highly inflated countries tended to stagnate; some of the low inflation countries seem to be developing at a relatively faster rate: (1) In those countries where inflation coincided with rapid development, the latter can best be explained by other factors (absorption of foreign resources, improvement in the terms of trade) than by the full utilisation of capacity supposedly brought by an inflationary price rise. (2) In recent periods the acceleration of inflation has coincided with a slowing down of the rate of economic development.

money factors

On the basis of the above analysis, it is concluded that the behaviour of inflation in Latin America seems to conform much to what might be expected in the light of old fashioned theories. The role of old fashioned monetary and fiscal policy is vitally important. Money factors are not residual but at the very core of the process. The inflation ridden countries are those that choose incompatible targets.

Summarising the arguments given above, and explaining the controversy briefly in the context of the Indian economy, the question whether inflation is unavoidable or not in a developing economy is basically dependent upon the question about the theory of inflation one would consider applicable to such an economy. In this area of economic theory, as we have already seen, we confront the schools of thought: The Structuralist, and the Monetarist. As we have already observed, the debate between these schools has taken place largely in Latin America. Summerising the views of the monetarist school, we find that they believe in the basic postulates that inflation in underdeveloped countries has been the consequence of the expansion of spending financed either by bank credit or money creation: (a) some are of the opinion that excess expenditure on goods and services in relation to real output causes inflation, (b) others believe that an excessive supply of money in relation to its demand is the cause of inflation.

inelasticity of supply

The structuralists do not uphold these point of views. The changes in spending and credit, in the opinion of the structuralists are merely the symptoms and not the root cause of the malady of inflation existing in these countries. In the absence of any increase in total spending or money supply, there would still be a possibility of inflation due to the inelasticity of supply response of various sectors of the economy, particularly agriculture. This supply response is based not on monetary expectations but on physical bottlenecks to production.

(i) The monetarist school believes that correction of inflation will lead to the attainment of higher levels of economic development.

(ii) The structuralist, on the other hand, believe that the attainment of economic growth will cure inflation.

(iii) The monetarist school generally believe that inflation is not only avoidable but it is harmful for economic growth.

(iv) The structuralist on the other hand believe that inflation is unavoidable and, therefore, it is in the nature of a necessary evil.

When we examine the structural theory of inflation we find that a basic assumption of this theory is the existence of: (i) an inelastic supply of agricultural products; and (ii) of the existence of bottlenecks in the capacity to import. A rising population exerts a chronic upward pressure on imports and food prices. These respectively, raise domestic costs and set off wage demand, with oligopoly pricing in industry and trade facilitating the upward price movement. If the source of revenue is largely from indirect taxes and if the government operating budget is inflexible in real terms, which is true in case of some of the Latin American countries, the rise in prices would generate fiscal deficits which would have to be met by central bank borrowing.

additional credit

The higher cost price level also 'forces' the banking system to provide additional private credit. Although tight money could thus prevent the cost price rise, with import and agricultural prices rising autonomously, a fall in industrial price and wages would be required. It has been upheld by Mr R.J. Mody that "if the latter two are sticky downwards, a substantial drop in output and employment would be needed to force them down. Thus structural inflation cannot be controlled by monetary policy without arresting the process of economic growth. Therefore, monetary policy has no role to play in achieving price stability if such a structural theory of inflation is realistic."[3]

It has been stated by some that the structural theory of inflation has been considered relevant to Latin American countries but some of the assumptions underlying this line of reasoning are not quite applicable to countries such as India.

(i) Agricultural production in India has not been inelastic with respect either to prices or to income.

(ii) In the context of the Indian economy, the main source of government revenue is not indirect taxes as it has been the assumption in the above analysis.

(iii) It may be true that supply rigidities in certain sectors of the economy and limitations of export earnings create bottlenecks for the growth of the remaining sectors of the Indian economy, but this does not seem to be the chief explanation of price rise in India. If agriculture were the lagging sector responsible for over-all inflation, agricultural prices would have been rising faster than other prices so that the increase in the prices of food products would be greater than the general price level. Yet, in the context of the Indian economy, we find that food prices have increased at approximately the same rate, if not at a lower rate, as the rise in the general price level. Supply elasticity in agricultre may not be very low because of the absence of some of the factors mentioned above i.e. lack of incentive due to the land tenure system etc. There are good reasons to believe that agricultural production in India is not completely inelastic with respect to prices and incomes.

functional price rise

On the basis of the arguments given above, we can conclude that the structural theory may not be sufficient explanation of inflationary price rise in India. It is possible that to a certain extent these structural imbalances and institutional rigidities are partly responsible for increasing prices in India. If this statement is true, restrictive monetary policies, to that extent, can achieve complete stability only at the cost of reduced output and employment. Such a price rise, sometimes called a functional price rise, is needed to adjust relative prices for the sake of inducing movement of real resources.

Richard Porter opines that in the context of a predominantly agricultural economy, it may be impossible to counteract temporary shifts in the price level with the help of traditional monetary policy. Suppose a fall in agricultural production in a period results in a price rise. Now even if this production rises to the previous level in the following period, food prices will not fall because as it has been assumed, farmers are likely to increase their holdings of foodstuffs as a fraction of their total assets, since they may not want to sell their enitre production at falling prices. In a case as this, the monetary authority will not be able to prevent a price rise.

The argument has been challenged by Pattrick and Chandler on various grounds. They are of the opinion, that if farmers holding of foodgrains as a fraction of their total wealth is assumed to remain constant, monetary policy will be effective in reducing the price level.

For the purpose of accelerating the process of growth an equally forceful argument is made by the monetarist school in favour of mild inflation. The monetarists believe that mild inflation will be able to accelerate the process of growth. The rate of growth, according to this view-point, is dependent upon the rate of savings and investment. Therefore it is argued that a higher rate of savings and investment would promote a higher rate of growth. On account of low levels of income in less developed countries, voluntary savings are not high and, therefore, a case is made in favour of 'forced' savings through inflation. Investment in excess of voluntary savings may be financed by an increase in bank credit, extended through private business or government which through deficit financing would acquire initial resources for investment. If total output falls short of increased demand for it, the likely result will be an inflationary price rise. If consumption expenditure is assumed to increase in proportion to rising money income, real consumption may actually fall, resulting in forced savings. However, this argument assumes that consumers have money illusion.[4] If the money illusion is absent, that is, when real consumption depends upon real income, there may not be any forced saving.

important question

A.H. Hansen in his book *Economic Issues of the 1960's* express the opinion that the really important question is not whether inflation should be used for development or not, but rather what is the optimum degree of inflationary pressure which might be legitimately exerted in order to pump the necessary amount of forced savings out of the community. It is not at all possible to define the optimum degree of inflationary pressure. Second, a major operational problem in implementing an economic programme involving forced savings, is the administrative difficulty of controlling inflation at the desired level.

Milton Friedman is of the opinion that such a deliberate inflationary policy is likely to be ineffective. Such an inflationary policy is likely to set up private anticipations which will defeat any redistributive effects. This fact should be mentioned very clearly that once people adjust to a certain rate of inflation, the government has to step up the rate higher and higher. On the basis of these arguments, we find that Milton Friedman is quite dubious about the effectiveness of inflation in promoting any economic development.

If once people anticipate inflation there may not exist any money illusion. Real consumption may not at all decline and real savings may not register any increase. If the upper income group increases the luxury consumption, which is the most likely probability, and if the demonstration effect on consumption works successfully, it is quite likely that the marginal income of the people is spent upon conspicuous consumption. Here it is clear that the poor wage earner is sacrificing and the person to gain by it is not the society but the upper income group.

There is the possibility that the government can mop up the marginal income by taxes and thereby increase real savings in the economy. Now, this should be clearly understood that in countries such as India, the marginal tax rates are not as high as in some of the developed countries. Even if it is possible for the government to mop up the marginal income by taxes, the government must do additional real savings. This can be achieved only if expenditures by the government for current consumption purposes does not increase proportionately with their money revenue. This type of an abstinence has not been shown in India.

Therefore, it is questionable that the conditions required for the success of the forced savings mechanism will be met in an underdeveloped country such as India. "To the extent that these conditions are not met, the rate of inflation will be intensified and the attempts to force a higher rate of real saving will be ineffective. Once the community becomes acutely conscious of the effects of inflation and once it expects inflation to continue, real savings may actually fall."[5]

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Complexities of rural development

Rural Area Development—Perspectives and Approaches : Edited by R. P. Misra & K.V. Sundaram; Sterling Publishers, New Delhi; Pp 421; Price Rs 100.

Price Policy for Wheat in India : D. S. Sidhu; S. Chand & Co. Ltd, New Delhi; Pp 127; Price Rs 27.50.

The Responsiveness of Tax System in India : V.G. Rao; Allied Publishers Private Ltd., Pp 122; Price Rs 30.

Farm-size, Resource-Use Efficiency and Income Distribution : G. R. Saini; Institute of Economic Growth, Delhi; Pp 218; Price Rs 60.

Fundamentals of Applied Evaluation : K. Puttaswamaiah; Oxford & I B H Publishing Co.; Pp 227; Price Rs 48.

Farm Financing by Commercial Banks—A Regional Study : R.D. Sharma; Bharat Book Depot, Bhagalpur; Pp 127; Price Rs 35.

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IN CONNECTION with the bicentennial celebration of the American independence, the US Educational Foundation in India organised in 1974 a number of seminars of which one concerned itself with rural development. *Rural Area Development—Perspectives and Approaches* contains seminar papers dealing with various aspects of the problem of rural development. It is obvious that this volume containing 21 well prepared papers is the product of a joint effort of a multi-disciplinary group of people representing universities, research institutes, official agencies, voluntary organisations and social workers. An attempt is made in this volume to look at the whole gamut of rural and area development process in its broader perspective. The book should attract attention of all concerned because of the tardy progress recorded in rural areas in India during the last three decades, though the subject is supposed to have been given top priority in all the five year plans.

The editors have pointed out how the 'rural' is essentially agricultural; its settlement system consists of villages or home steads; socially it connotes greater interdependence among people and more deeply rooted community life; and occupationally it is highly dependent on crop farming, animal enterprises, tree crops and related activities. Thus 'rural' is characterised by non-urban style of life, occupational structure, social organisation and settlement pattern. The editors have emphasised that to properly understand rural areas and their problems, they must be viewed from two perspectives—an internal structural perspective and an external relational perspective. This implies that progress in rural areas requires structural changes internally and at the same time suitable changes in external relations. Each of these changes must mutually support the other for promoting human welfare which is the prime goal of all development.

BOOKS BRIEFLY

Reviewing the policy of rural development, the editors have pointed out how the government's policy has tended to swing between two extremes—one based on the Gandhian tradition emphasising small peasant farming, rural and cottage industries and local self government, and the other the western tradition emphasising technological changes, industrialisation and urbanisation relegating rural areas and their main activities to a secondary position embodying the view of ultimate disappearance of the rural sector and its replacement by the urban-industrial sector. It is being increasingly realised that the Gandhian model still constitutes the only sound theoretical basis for rural development planning in India.

It would be instructive to know viewpoints of some of the authors and critically examine them.

The first five papers in the volume have made an attempt to examine the policy approaches and instruments that have been employed so far for rural development. The purpose is to sift the experience gained so far and to point to lessons of policy that may be drawn for the future. P. Roy and B.R. Patil advocate a multi-level, multi-sector and multi-section concept or integrated rural development to tackle the pervasive prevalence of imbalances in rural economy. J.V.S. Rao and M.R. Apparow have tried to identify obstacles that impede effective implementation of "certain target-group-oriented programmes of rural development." D.V. Urs and R.P. Misra have underlined the factor of assimilation in the rural social system as a significant dimension of rural development. They have asserted that "it is the institutions and organisations of the people which can adopt, adapt and improve whatever evolves from within and comes from outside."

a comparison

Norton Ginsburg's paper on China's development strategies provides frame of reference for comparing the Indian approaches and strategies to rural development. The transition in China from 'walking on one leg' to 'walking on two legs' seems to have some parallel to the sequence of change characterising India's new economic policy. The paper by Benjamin Fisher deals with the approaches to settlement planning and critically reviews the pilot project exercise in growth centre planning in India. Bella Mody touches on the vital aspect of communication strategy for rural development. Her suggestion for transforming the broadcasting media into a participatory decentralised set-up deserves serious consideration. Arch Dotson's paper analyses the problem of designing administrative systems for subnational developmental efforts, whereas R.N. Haldipur and B.G. Verghese further elaborate on people's institutions and public participation which are vital elements in grass roots democracy. Surajit Sinha's paper is typical of the 'transition crisis' confronting many an Indian village. He has concluded that ecological reality and cultural tradition will need to be recognised more forcefully than they often are.

After reading the book a discerning reader becomes certain of one thing. The sweep and range of issues discussed and the welter of concepts, ideas and approaches analysed in this volume show that there is no single formula and neat solution to the problem of rural development. The great achievement of the seminar has been that the papers have thrown light on the complex issues of rural development and challenging need for framing our socio-economic policies with as much understanding as possible of the various facets of the problem of rural development.

From the reading of the book one is convinced all the more that since India is a land of small villages, nearly 75 per cent of rural population living in villages with less than 1,000 population, Gandhian model offers the best solution to the problem. Possibly this understanding has dawned on policymakers and the government, but it is the political will that appears to be lacking to implement rural development policies the theoretical contours of which have now become fairly clear.

WHEAT REVOLUTION

Price Policy for Wheat in India by D.S. Sidhu has made an attempt to focus attention on the factors associated with the wheat revolution. In particular the study attempts to determine the contribution of different variables, both economic and weather towards increased wheat yields, to estimate elasticity of marketed surplus of wheat with respect to its production and price, to find out the price-responsiveness of Punjab wheat yields directly and through derivation of supply function from wheat production function and more importantly, to examine the price policy for wheat during the past decade with a view to finding out the intervention level of prices of wheat.

This study assumes significance because wheat constitutes the second largest crop in the country, next to rice and is the main crop of Punjab where it occupies about 95 per cent of the net sown area. It also needs to be noted that foodgrain imports of India consisted mainly of wheat constituting about 90 per cent of foodgrain imports in 1975 and 1976. Further, since 1972-73, wheat production and its per hectare yield in Punjab state appears to have stabilised and have not been registering the anticipated progress in respect of semi-dwarf Mexican high-yielding wheat varieties, causing great concern. These factors impart great significance to this study carried out in 1976-77 and the conclusions arrived at by the author.

insight into problems

This study provides deep insight into the various aspects of the problem. It is observed that on the production front, the study indicates that the switch-over to the semi-dwarf varieties of wheat along with increased application of chemical fertiliser in areas having assured supply of irrigation water coupled with a positive price policy succeeded in bringing about what is popularly termed as the 'Wheat Revolution.' And yet on the basis of analysis of farm level data, the author has inferred that many wheat farmers in Punjab are still using low levels of various inputs, especially fertiliser. The author maintains that wheat farmers could increase returns from wheat production by about four rupees by investing one rupee on chemical fertiliser. The data also appears to indicate that investment on fertiliser-use is more profitable than on human labour. The analysis indicates that marketable surplus as a percentage of production increased with an increase in production and size of farmholding, the production-elasticity of marketed surplus being about 1:6 and the elasticity of marketed surplus with respect to its price being about 0.45; also the author has found that the farmer's income elasticity of demand for wheat is about 0.48. The study has positively established the fact that the supply curve of wheat in case of Punjab farmers is a positively sloping one.

The author has thus arrived at the conclusion that wheat yield is fairly responsive to fertiliser consumption and further that fertiliser use in its turn is responsive to wheat-fertiliser price ratio through wheat output. This has therefore important lessons for policy makers in adjusting levels of output price support and/or input subsidy levels.

relative merits

As regards relative merits of different approaches for determining intervention levels of prices of wheat, the author has pointed out that the terms of trade had been favourable to wheat farmers during the late 1960s but have become generally unfavourable since 1971-72 resulting in stagnation in wheat yields. The author therefore has argued that in order to improve growth rate of wheat, farmers should be provided with agricultural inputs at rates which provide them enough incentive to produce more and to maintain output prices at levels which are remunerative and can stimulate rapid adoption of new technology and capital formation in the agricultural sector.

The author, against the above background, has expressed great concern about frequent changes in agricultural price policy. For example, there was change from complete state trading in 1973-74 to partial state trading in 1974-75 and again to complate state trading in 1975-76 and 1976-77. He has however defended the highly pragmatic food policy for 1977-78 on the ground that it ensured incentive prices to producers, protected interests of consumers, particularly in deficit areas. avoided smuggling of foodgrains across the zonal limits and stimulated marketing efficiency.

The conclusions may appear commonplace but they are of great significance and especially so the attempt by the author to quantity responses of production, marketable surplus etc. to different variables. As M. S. Swaminathan in his brief preface has pointed out, this study will prove useful to planners, policymakers, administrators and scholars engaged in the field of agricultural research. It is fervently hoped that this painstaking and in-depth analysis of wheat production, marketing and price policy will provide a model and stimulate similar studies in respect of rice and other crops so that those in charge of formulating

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PATCHWORK TAX SYSTEM

There is substantial evidence to support the view that to a large extent the development of the present-day tax system in India has come about through a sort of patch-work adjustment process adopted from time to time to meet the short-term contingencies often arising because of temporary causes. This therefore necessitates a thorough reappraisal of the built-in responsiveness of the tax system as a whole as also of constituent taxes. V. G. Rao in his book *The Responsiveness of Tax System in India* has made an attempt to seek answers to various queations such as: Is the Indian tax system automatic responsive type? If so, to what extent? If not, why not? To what extent is it being made responsive through discretionary tax changes? These are all vital questions, because if a tax system has built-in automatic responsiveness so that tax-yields automatically increase with increase in the levels of income of the people without resorting to additional taxation, this would be the most saitsfying device both from the point of tax-administrators and the people. The findings of the study therefore assume significance.

It is observed from the study that though the overall trends of revenue from taxation in India show a steady increase over the years, a close examination discloses that the built-in flexibility of the tax-revenue especially in relation to national income has not improved at all. It was of the order of 0.83 for the period 1951-52 to 1973-74. During the latter part of the above period, though the composition of the tax system underwent significant changes, that did not however facilitate growth in automatic responsiveness of the tax system.

Since the beginning of the third plan, the tax system in India has become heavily oriented towards the urban and industrial sectors of the economy, practically setting aside agricultural sector from the tax net. This follows from the increasing importance of taxes on non-agricultural income and union excise duties and declining importance of land revenue and agricultural income-tax. But the logic demands that increasing tax yields must come, desirably automatically, from areas where increments in incomes take place. For years terms of trade were moving in favour of the agricultural sector and incomes were largely accruing to households with medium and large-holdings suggesting presence of considerable reserves of income in the rural sector that could be utilised for financing developmental requirements of the agricultural sector itself.

Over the planning years deployment of public investments in the agricultural sector has been substantial, raising agricultural productivity and incomes but the contribution of the agricultural sector to public revenue has remained more or less stagnant constituting an insignificant proportion of total income generated in that sector. There is indeed need of having fresh look at taxation of agricultural incomes from an objective point of view. The author has recommended a surcharge on land revenue and subsequent replacement of land revenue by agricultural holding tax as recommended by the Raj committee.

erratic base

The author is also critical of the Indian personal income tax which has become complex because of erratic and unstable base, changes in rate schedule, levy of surcharges and various exemptions permitted. He has emphasised the need to simplify both personal income tax as also the structure of corporate income tax with all its exemptions, allowances and generous expense provisions. There is need for rationalising most of the direct taxes in India which have grown in a slipshod way being influenced by whims and caprices of individual finance ministers and exigencies of the times.

In recent years the Indian tax system has become more and more oriented towards taxes on commodities and on consumption goods. Often the explanation of the inelastic nature of the Indian tax system is sought in the predominance of commodity taxation. But surprisingly the result of this study provides no empirical basis for that assumption. Contrary to expectations, the data prove that "indirect taxes in general contain better automatic growth potentialities." The author has recommended consideration of the possibility of imposing indirect taxes on services which are in vogue in many countries.

This analysis of responsiveness of the Indian tax system is welcome on various accounts. While there is urgent need in developing countries for mobilising increasing portion of rising incomes for investment purposes, there is also need to build a tax system with sufficient built-in flexibility automatically producing more revenue out of additional income because people generally react unfavourably to new taxes and secondly frequent changes in rate schedules of existing taxes create complications both for the tax-payer and tax-administration. Attempt therefore should be made to increase the automatic responsiveness of the tax structure in the country.

If taxes on income and capital have failed to automatically respond in proportion to rising incomes, one reason is large scale evasion of tax payment by people. This means along with tax reforms aimed at increasing automatic responsiveness of tax system, there is equally urgent need for improving tax-administration. Taxes on commodities may be generally regressive but the study has shown that they contain more automatic responsiveness and from that point of view are welcome. In this connection considaration may be given to value-added tax which would be both more equitable and responsive. The study shows once again how the Indian tax structure has grown in a haphazard manner and how there is need to overhaul and rationalise the whole system.

FARM ECONOMICS

It is well known that the ability of agriculture to contribute to the welfare of farm families and to economic development is dependent upon the level of incomes and surpluses generated in the agricultural sector. This is all the more so in the case of India where a vast majority of people derive their subsistence from agriculture. It may broadly be said that the level of agricultural incomes is determined mainly by the efficiency with which farmers are able to make use of the resources currently at their disposal for allocation among alternative productive activities on their farms. It follows from this that if farmers are making inefficient use of resources already at their disposal, then there certainly exists an unexploited potential for increasing the level of income of farmers and creating larger surpluses as a source of further economic growth. But if it is found that farmers are already making optimal use of the existing resources by their proper distribution among various available alternatives, it would logically follow that additional increase in level of incomes of farmers and creation of more surpluses can come about only through investment of additional resources and through technological changes in the agricultural sector.

efficiency criterion

G. R. Saini in his book *Farm size Resource-use, Efficiency and Income Distribution* which is based on his Ph.D. thesis, has made an attempt to explore the efficiency in the use of various existing resources at the disposal of farmers in Punjab and UP and to determine the potential increases in farm incomes through their reallocation among available alternatives. The author has undertaken to analyse some related issues currently debated, namely the nature of returns to scale in Indian agriculture, relationship between farm size and productivity per hectare, the marginal productivity of labour and the relevance of market wage-rate for the valuation of family labour engaged in the agricultural sector. The merit of the look lies in this that the author has based his study on the analysis of disaggregated farm management data for various categories of farms classified on the basis of farm-size and extent of their dependence on family labour. In addition, the author has also tried to analyse changes in some of the economic relationships associated with transformation of Indian agriculture from traditional to modern stage and impact of green revolution on levels of income of farm-holders.

The findings of the study clearly appear to be contrary to some of the common assumptions so far made in respect of Indian agriculture. Thus the main finding is that farmers in Punjab and UP utilise the resources at their disposal efficiently. For policy purposes this would imply that moving along the existing production functions in the traditional agriculture is not going to improve the lot of farmers. This means further contribution of agriculture to economic growth and welfare of farm families can come about only through use of additional resources, new inputs, improved techniques and new skills in the agricultural sector of India.

Existence of 'dualism' is also assumed in the agricultural sphere consisting of hired labour paid according to its productivity and family labour whose imputed costs are much below than their contribution and therefore underpaid, if not gratuitously used. The author undertook to analyse this oft-repeated assumption on the basis of farm-size and the extent of dependence on family labour. His findings clearly contradict the hypothesis of 'dualism' in Indian agriculture. In this connection the author has concluded that "a simple model based on profit maximizing behaviour of farmers is quite appropriate and sufficient and that there is no need to resort to model of 'dualism' to explain peasant behaviour."

technological change

Analysing the impact of technological changes in Indian agriculture, the author has suggested that "the inverse relationship between farm size and productivity of farm business income no longer holds true in the post 'green revolution' period." The analysis has clearly brought out differences in factor endowments of different size classes of farms leading to differential adoption of new technology resulting in marked inequality in the distribution of income between small and large farmers on the one hand and landless agricultural labourers and farm-owners on the other. The author has tried to argue that big farmers have gained considerably by the green revolution with its new technology and has also concluded that their rising incomes are a promising source of mobilising resources for economic development as otherwise the additional incomes would be spent mostly on consumer goods. The findings of G. R. Saini's study help understand the structure of agriculture in parts of Punjab and UP and for evolving policies for agricultural reorganisation and development.

From this study which is restricted to parts of Punjab and UP, it is not possible to generalise and formulate uniform all-India policy for agricultural development. For example, the hypotheses that existing resources at the disposal of farmers are not optimally used, that there is 'dualism' in the agricultural sector with hardly any payment (direct or indirect) to family labour, and that marginal product of farm labour is zero, if not negative. will have to be analytically disproved in the case of other parts of India also before suitable policies for agricultural development are evolved and implemented there. The author's conclusions appear too good to be true in major parts of the country where wasteful use of available resources in the agricultural sector and general inefficiency are the most striking features.

APPLIED EVALUATION

It has come to be realised that plan formulation, appraisal, monitoring and evaluation are integral and inter-connected aspects of economic planning which has come to be accepted by most of the developing countries to attain a number of socio-economic objectives. It is believed that while technique of plan formulation are being improved, time has come to lay greater emphasis along with plan implementation on constant monitoring and evaluation of plan schemes.

The importance of programme evaluation came to be recognised in this country as early as the commencement of the planning era as is obvious from the fact that the Programme Evaluation Organisation was set up in 1952 and since then in every subsequens five-year plan steps were taken to strengthen the evaluation machinery both at the central and state levels. But unfortunately no substantial results could come out of the evaluation efforts as evaluation work done so far was of the nature of post-mortem and time factor in evaluation was completely lost sight of.

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to micro and block level planning has come to be recognised as an important step and a number of programmes have come to be initiated from the angle of 'beneficiary' and 'area' development approaches. In addition, a number of specific projects are being formulated with the help of financial assistance from international agencies. All these developments make the role of evaluation all the more important.

Karnataka was the first state in India to set up the Evaluation Directorate and K. Puttaswamaiah as an economist attached to that organisation had the opportunity of conducting a number of evaluation studies. *Fundamentals of Applied Evaluation* which is the outcome of that experience may be said to be the first on the subject written by an Indian author keeping the Indian context as the background.

The author begins with a chapter on 'Conceptual Framework' wherein the content of evaluation, its scope, techniques and methods, characteristics, criteria for effective evaluation and role of effective monitoring are all clearly analysed. In India we find a wide gap between project formulation and its implementation because of the various problems that crop up. It is with a view to identifying these problems arising at the implementation stage that a clear understanding of the concept of plan evaluation and its framework becomes absolutely essential.

role of methodology

Methodology plays a vital role in the process of evaluation. The author has emphasised the techniques of field investigation which can be employed for different types of studies and situations. The evaluator must possess thorough knowledge of techniques of field investigation and he must be in a position to identify major problems and suggest remedial measures. He must collect reliable data and have a clear perspective. The author has analysed the various issues that are likely to crop up in this area.

Statistical techniques are assuming great significance in all evaluation programmes. The author has emphasised that while interpretation of data by the use of statistical methods is an important factor in conducting evaluation studies, if not systematically employed, it is sure to arouse suspicion about the entire structure of study. The statistical methods will have to be used by those who are conversant with them, with impartiality and with a right perspective. The author has indicated the various sources of data such as those collected by the National Sample Surveys which could be of much help. There is no doubt that among developing countries, India occupies a premier position in buiding up machinery for collecting data in regard to various sectors of the economy. Much use can be made of the data as basis for evaluation work.

instructive chapter

The chapter on current issues in cost-benefit analysis is very instructive as cost-benefit analysis is being increasingly used for determining investment priorities. The author has explained the concept, the rationale of cost-benefit analysis and specific techniques used for estimating relevant magnitudes. He has pointed out how this technique differs from conventional financial appraisal, what kinds of external benefits or costs are to be included and difficulties in measuring social benefits. The major advantage of cost-benefit analysis, to the extent it can be applied effectively, is that it helps quantify all benefits and costs instead of relying on vague judgements.

In addition to cost-benefit analysis technique, the author has drawn attention to various alternative methods of evaluation such as capital-output ratio, input-output technique, critical path method, simulation technique and so on. Different evaluation techniques may have to be employed depending on the nature of the project to be evaluated.

While analysing some general issues concerning project evaluation, the author has drawn attention to aspects such as time factor, and self-evaluation. Time factor is a major consideration in ex-ante, concurrent and ex-post evaluation. He has also suggested that only important projects should generally be selected for evaluation and at an appropriate time. Objective self-evaluation at every stage of a project is of great importance and should become an integral part of the implementation process.

The whole process of evaluation culminates in presentation of the report which naturally has attracted the attention of the author who has emphasised the fact that the evaluation report should be clear, concise, accurate, complete, and above all timely.

It is a well written book with clarity and keeping in view the Indian background, requirements and limitations. Since satisfactory execution of a project is as important as its proper formulation and since evaluation has become an indivisible part of execution, the book will greatly assist the personnel of the Plan Evaluation Organisation as also of the Bureau of Statistics who would get an insight into the nature of statistics required for evaluation purposes. The only deficiency—if deficiency must be pointed out—is that the addition in appendices of one or two case studies of which the author has had abundant experience, would have further enhanced the utility of the book

FARM FINANCING

In recent years the scene of rural credit has undergone significant changes. With nationalisation of commercial banks and adoption of multi-agency approach to the problem of rural finance, institutional finance appears to be rapidly replacing non-institutional sources dominated by the traditional money-lender. The Reserve Bank reports give a general picture of increasing the role that is being played by institutional sources, especially the public sector banks in the sphere of agricultural finance. R.D. Sharma, the author of *Farm Financing by Commercial Banks—A Regional Study* has taken the view that time has come to evaluate the role of commercial banks in respect of different regions because of wide differences in conditions and practices relating to agriculture and therefore need to devise a suitable region-wise strategy of agricultural development and therefore also of agricultural financing. He has taken up this study in respect of the district of Bhagalpur in the state of Bihar. It incidentally happens to be one of the most backward districts in one of the backward states in India.

The author has made it clear at the very outset that however important, credit is just one of the agricultural inputs and unless its provision is accompanied by simultaneous provision of other inputs such as water, electricity, fertiliser, seeds and above all right attitude (instead of do-nothing attitude of many farmers whom the author met), bank credit by itself can achieve very little. It follows from this that other agencies will have to move in step with financial institutions in the region, if upliftment of agriculture is to be brought about. And yet the fact remains that availability of right amount of credit, at right time, at appropriate rates of interest and to right persons can under favourable circumstances play a crucial role in agricultural development.

Bhagalpur's total annual credit requirements are estimated at round Rs 43 crores. The total amount of institutional credit provided is paltry, constituting only about 6.6 per cent of the total credit requirements. This means money-lenders still dominate the rural scene. Taking all credit agencies together there is still annual credit gap of Rs 22.90 crores in the district.

There has been three-fold increase in branch expansion in the district: but there has not been similar trend in deposit mobilisation. The author has noted that the performance of new commercial bank branches in regard to deposit mobilisation has been most disappointing.

It was observed that farm advances have been negligible in terms of coverage and amount. Only about 0.3 per cent of total cultivators have received commercial bank credit; also bank lending has been heavily concentrated in a few blocks creating great imbalances and disparity among different blocks.

In Bhagalpur district farm advances constitute only about one per cent of total deposits and only about five per cent of total advances, the credit-deposit ratio being as low as 22 per cent. This clearly shows the backwardness of the district in respect of banking development. It is also observed that a major share of bank loans (nearly 33 per cent) has gone to big farmers who constitute only about eight per cent of the total loanees.

Naturally due to negligible proportion of beneficiary farmers and inadequate amount of farm loans, the overall impact of commercial bank loans has neither been widespread nor pronounced. But it is a hopeful sign that in case of farmers who could get bank loans, positive and favourable results could be observed in respect of cropping pattern, changes in levels of productivity and per hectare net income. Another hopeful feature in respect of beneficiary farmers has been that the they are observed to invest their savings for improvement of their lands.

With all these achievements, the author

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Refractory Section	Kulti, Dist : Burdwan.

could not fail to note the general inadequacy in respect of coverage of population, of area and credit requirements. Also he observed a multitude of hurdles in respect of bank financing—shortage of funds, complicated procedures, ascertaining creditworthiness of farmers, lack of supervision over enduse of loans and overdues.

On the basis of his analysis and findings the author had made a number of recommendations to improve commercial bank financing to agriculture in the district of Bhagalpur. He has suggested that preference should be given to unbanked and underbanked blocks in respect of opening of new bank branches. He wants that the branches should be vested with certain amount of discretionary powers of sanctioning loans upto a reasonable amount to avoid delay in disbursement of loans. He wants that there should be proper integration of cooperative credit societies and commercial banks because together they can play a much more effective role. The two should concentrate their attention on mobilisation of resources in the district by creating suitable climate by effective propaganda and other available means. For this they should intensify saving campaign and link deposit mobilisation with credit disbursement; there should also be reassessment of interest rate policy.

local personnel

Employment of qualified local people with knowledge of district problems and background, simplification of forms and procedures, use of local language, introduction of system of pass book wherein all assets and liabilities of farmers are shown, and changing the concept of creditworthiness are some of the suggestions which the author has made to improve commercial bank lending to the agricultural sector.

Picture of commercial bank lending appears rosy when read in the reports of the Reserve Bank of India and in bulletins issued by some of the public sector banks. But micro studies such this by R.D. Sharma show that things have not changed much and small and marginal farmers and landless agricultural workers remain practically out of consideration of commercial banks. The study also shows the limitations of macro studies giving only in aggregate terms the number of farmers with bank accounts, aggregate amount lent to agriculturists and so on. All this appears impressive. But things have remained much the same at the grassroots. There is no ground to disbelieve that picture in this regard is much different in backward districts in other states in India. Much worse, the initial enthusiasm and euphoria created after nationalisation of major commercial banks has tapered off and as in most other respects, in the field of agricultural finance also things again have started moving in a rut, the general attitude of planners, policy-makers and commercial banks being characterised not by enthusiasm, drive and dedication but by indifference, if not hostility.

Books Received

The Responsiveness of Tax System in India: V.G. Rao; Allied Publishers Private Ltd, 13/14, Asaf Ali Road, New Delhi-2; Pp 122; Price Rs 30.

Farm Size Resource-use Efficiency and Income Distribution: G.R. Saini; Allied Publishers Private Ltd, New Delhi-2; Pp 218; Price Rs 60.

Sugarcane: G.N. Babu; Allied Publishers Private Ltd, New Delhi; Pp 237; Price Rs 48.

Finances of Bangalore Municipal Corporation: S. Rama Rao; Allied Publishers Private Ltd, New Delhi-2; Pp 114; Price Rs 25.

The Structure of the Keynesian Revolution: Ghanshyam Mehta; Allied Publishers Private Ltd, New Delhi-2; Pp 200; Price Rs 45.

Coop. Press and Publicity—Report of Regional Workshop: International Cooperative Alliance, "Bonow House", 43 Friends' Colony, Box No 3312, New Delhi-110014; Pp 70; Price Rs 15.

Monetary Policy in a Developing Economy: Venkatachar Joshi; Vivek Vardhini Education Society's Research Institute, Hyderabad-500001; Pp 43; Price Rs 5.

The Gang and 900 Million: S. Nihal Singh; Oxford and IBH Publishing Co, 66, Janpath, New Delhi-110001; Pp 118; Price Rs 32.

The Third World—Quo Vadis? : Gottfried Wuest and Minoo Masani; Jaico Publishing House, 125, Mahatma Gandhi Road, Bombay.1; Pp 190.

Classical Theory of Economic Growth: K.C. Roychowdhury; Macmillan Co of India Ltd, 4, Community Centre, Naraina Industrial Area Phase I, New Delhi-110028; Pp 205; Price Rs 20.

The Collected Works of Mahatma Gandhi: *Vol 73 and 74*; Director Publications Division, Patiala House, New Delhi-1; Pp (Vol 73) 504; Price Rs 9; (Vol 74) 432; Price Rs 9.

Taxes and Incentives 1979-80: *A Guide for Investors*: Indian Investment Centre, Jeevan Vihar, Sansad Marg, New Delhi-1; Pp 89; Price Rs 20.

Human Capital Formation and Its Utilisation: Autar S. Dhesi; Sterling Publishers Pvt Ltd, AB/9 Safdarjang Enclave, New Delhi-110 016; Pp 283; Price Rs 100.

Rural Area Development—Prospectives and Approaches: R.P. Misra and K.V. Sundaram; Sterling Publishers Pvt Ltd New Delhi-16; Pp 428: Price Rs 100.

TRADE WINDS

Indo-Soviet Trade

The Soviet Union has agreed to buy additional quantities of non-traditional items such as garments, cosmetics, woollen knit-wear from India. It has also been decided that the Soviets would import additional quantities of tea and coffee from India. These decisions were taken during the visit of a high official level delegation which visited the Soviet Union for the Indo-Soviet joint panel meeting. The delegation had representatives from the ministry of Commerce, Finance and the Planning Commission.

According to an official assessment, additional trade worth Rs 60 crores would be generated as a result of the additional purchases from India. An increase in the rupee kitty of the Soviets has been made possible on account of an increase in the oil bill which India would have to pay the Soviets for the import of crude and petroleum products.

As a result of 35 per cent hike in the petroleum prices announced by OPEC countries, the prices for the Soviet crude would automatically go up. According to rough estimates, the increase in oil bill would be to the tune of Rs 60 crores in the current year alone. The prices of Soviet crude are linked with OPEC prices and with every increase in the prices by OPEC nations, Soviet crude prices are also increased. However, according to authoritative sources, the exact extent of the increase has yet to be decided. Under the Indo-Soviet protocol Soviets had agreed to supply 1.5 million tonnes of crude. However, it is hoped that the Soviet Union would also supply additional quantities of crude during the current year.

Exports to US

Tariff reductions agreed to at the recently completed Multilateral Trade Negotiations (MTN) could "significantly improve" the competitive position of a variety of Indian products in the US market from 1980, according to an official US release. The US trade policy officials anticipate that the reductions, to be implemented over a period of eight years, will increase the volume of Indian exports.

Some of the US tariff cuts of particular interest to India include ornamented women's cotton blouses from 35 per cent to 16.5 per cent, miscellaneous ornamented cotton furnishings from 30 per cent to 12.8 per cent, steel bars from eight per cent to 3.2 per cent, lace made of vegetable fibres from 34 per cent to 13.6 per cent, cotton handloom fabrics from 13 per cent to six per cent and ornamented women's cotton dresses from 35 per cent to 14 per cent.

During 1976, the United States imported from India $22 million worth of the listed items. The products listed were chosen on the basis of past trade patterns and the size of ths US tariff cuts are likely to offer considerable opportunity for expansion of exports to the United States. They, however, exclude heavily traded items for which there were relatively small tariff cuts, and products imported into the United States in small quantities for which there were large tariff cuts.

Also, the products indicated do not include those already entitled to duty-free treatment in the United States under the Generalised System of Preferences (GSP). The tariff cuts, it is pointed out, are bound to benefit many developing countries, including India, during the 1980s from US agreements to reduce and bind its tariffs on a number of semi-processed and simple manufactured products.

Trade with Portugal

Indo-Portuguese trade, which has been widely fluctuating since the resumption of trade ties from 1975, registered a favourable balance for India by Rs 6 crore in 1975-76 out of a total turnover of Rs 6.25 crore. While the turnover fell to Rs 1.96 crore in 1976-77, it again picked up to reach the level of Rs 6.54 crore the following year.

Presently, there is no industrial and economic relationship between India and Portugal. The Trade Development Authority has recently conducted a market survey in Portugal. The products selected are electronics, auto ancillaries, industrial fasteners, small handtools, scientific instruments, readymade garments, leather goods and imitation jewellery.

Portugal provides a relatively cheap source of ship repairing facilities. About a dozen Indian merchant ships landed at Lisbon dockyard for repairs during the last two years. The cost of repairs to the ships was cheaper in Portugal than at other European ports. Indian railways have also purchased insulators from Portugal and there are further possibilities of purchasing this item.

Portugal made a formal request for membership of the European Economic Community in March, 1977. It is expected that negotiations for its entry into the EEC would be completed by 1981.

Indo-Bulgarian Cooperation

A protocol providing for further expansion of economic, trade, science and technical collaboration between India and Bulgaria was signed by Dr D.T. Lakdawala, deputy chairman, Planning Commission, and the chairman of the Planning Commission of Bulgaria, Mr Kirilzarev, during the former's visit to that country. According to a Bulgarian embassy press release, Dr Lakdawala during his six-day visit which ended on September 6 also called on the chairman of the council of ministers of the Peoples Republic of Bulgaria, Mr Stanko Todorov.

German Fertiliser for West Bengal

An additional 15,000 to 20,000 tonnes of fertiliser will be supplied to West Bengal by the Federal Republic of Germany under an agreement signed between the two countries, recently. This is the sixth supply under the Indo-German fertiliser project for West Bengal since 1974. A total of 73,000 tonnes worth Rs 10 crores had been supplied to West Bengal since then West Germany was one of the few donor countries giving united aid. West German government would provide the money and the actual supplier would be chosen by a global tender.

Consultancy Exports

India's export earnings from consultancy services this year have shot up by 45 per cent. This also represents an increase of 100 per cent over the performance of the past two years. According to the latest figures, Indian firms bagged contracts worth Rs 14 crores in 1978-79 as against Rs 9.5 crores in the previous year. Again the earnings in 1976-77 were placed at Rs 7.5 crores. Out of the 90 firms in the public and private sector as many as 60 are providing consultancy services for various projects abroad. The figures, of course, relate to only those firms which are registered with the Federation of Indian Export Organisations (FIEO).

The nature of services provided by Indian consultants include financial management for shipbuilding and repairing operations, engineering services for urea, fertiliser, petroleum, copper, power and hotel projects. Majority of the contracts have been bagged in the Gulf countries with Africa and Asia following suit. Some of the major companies which have been providing services to the markets abroad include : Agrima Project Engineering and Consultancy Services; Consulting Engineering, Development Consulants; Engineering India; Howe (India) Pvt Ltd; M.N. Dastur, Metallurgical and Engineering Consultants, Ranchi; National Industrial Development Corporation; Rail India; Tata Consultancy Services and Tata Consultancy Engineering and Water and Power Development Consultancy.

IMF Lending

The International Monetary Fund (IMF) has decided to further liberalise its lending under its Compensatory Financing Facility (CFF) mainly intended to help primary exporting countries having export shortfall. CFF had been liberalised earlier in 1975. Now it has been decided that the fund would be prepared to authorise drawings of up to 100 per cent of a member's quota, provided the Fund is satisfied that the member country has been cooperating with the fund in efforts to find appropriate solutions for its balance of payments difficulties.

Duty Exemption for Coffee

The central government by a notification issued in August last year, had exempted instant coffee from export duty leviable thereon. This exemption was granted in order to improve the competitive position of Indian instant coffee in international markets. The exemption has since been reviewed and has now been extended up to the end of February, 1980.

Carpet and Woollen Exports

The chairman of the Wool and Woollen Export Promotion Council (WWEPC), Mr P. L. Rahi, stressed at a press conference last week that we are on the verge of losing the world market for carpets. Energetic steps, therefore, are needed to remedy the situation. The exports of carpets from this country which had gone up to nearly Rs 85 crores during the three years to 1977-78 from just about Rs 40 crores in 1975-76, he revealed, had declined to approximately Rs 81 crores in 1978-79 and just to about Rs 8.08 crores during the first quarter of the current financial year. Compared to the exports in April-June, 1978, the exports during April-June this year declined by as much as Rs 12.32 crores.

Mr Rahi attributed the sharp setback to our exports of carpets to two main factors: (i) the growing preference in the importing countries for the carpets manufactured out of semi-worsted yarn (30 to 40 per cent blend of the imported yarn with indigenous wool) and (ii) the mounting costs of indigenous wool. The competition from Pakistan as well as Iran, notwithstanding the fact that the latter was said to be vacating this area of exports, Mr Rahi stressed, was intense. As Pakistan and Iran made carpets out of superior wool, the Indian carpets were yielding just about half the price of Pakistani carpets(Rs 360 per sq. metre, as against Rs 760 sq. metre) and less than 20 per cent of the price which the Iranian carpets commanded (Rs 1,800 per sq. metre).

The WWEPC chief however, expressed the view that we can definitely achieve a target of Rs 200 crores worth carpet

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exports within the next two years if the industry is allowed duty-free imports of New Zealand wool and the manufacture of semi-worsted yarn is exempted from the excise duty. The recent reduction in the import duty on wool from 75 per cent to 45 per cent, he emphasised, had not brought any relief to the carpet manufacturers as the excise duty on semi-worsted yarn had been raised from Rs 7.5 per kg which along with the additional duty of 15 per cent, now has increased to Rs 8.63 per kg. Pakistan, Mr Rahi pointed out, did not impose any custom or excise duties on wool.

The carpet manufacturers, Mr Rahi further stated, were feeling financial difficulties. Steps were needed to ease this situation as well.

Export Prospects

Mr Rahi disclosed that there were very good prospects for exporting ready made garments to West Asia (these exports could be stepped up easily to Rs 200 crores), woollen fabrics to various parts of the world (Rs 50 crores worth exports could be effected in this line) and woollen knitwear to the general currency areas, especially Italy, the USA, the .UK, Sweden, France, Norway, etc. The WWEPC has fixed the following targets for the current financial year: woollen knitwear Rs 30 crores, blankets Rs five crores, shawls and scarves Rs two crores and woollen fabrics Rs three crores.

The bright prospects for the exports of woollen fabrics and readymade garments, Mr Rahi emphasised, however, could be availed of, as in the case of carpets, if imports of raw wool were allowed free of duty and excise duties were removed at the processing stage. The duty drawback scheme, he pointed out, was no answer. It was not applicable to the carpet industry. But even if it were applicable, it would not be of much use because of the long period, over a year, required in the processing of raw wool to the stage of manufacturing finished products. There were also the difficulties of assessing the quantum of imported wool used in blends with the indigenous material.

State Loans Fully Subscribed

All the 21 state loans for Rs 276.75 crores were closed on September 1, the opening day of the subscription list, after being fully subscribed.

The 6.5 per cent state loans 1989 which opened on September 1, were to close on September 3 or earlier after being fully subscribed. The states have the right to retain subscriptions up to 10 per cent in excess of the notified amount. The banks and the Life Insurance Corporation are among the major buyers of the state loans. Fifteen states had offered to accept their maturing securities for conversion into new loans. Six states—Himachal Pradesh, Jammu and Kashmir, Meghalaya, Manipur, Nagaland and Tripura did not have any maturing securities.

Ottawa Meet on Food

An official delegation headed by Mr Bhanu Pratap Singh, minister for Rural Reconstruction, represented India at the Fifth Ministerial Session of the UN World Food Council held in Ottawa from September 4 to 7.

The other members of the delegation were, Mr B.S. Raghavan, Additional Secretary, department of Food and Mr D. R. Bhumbla, Agriculture Commissioner.

The World Food Council discussed among other subjects, the current food situation and the measures to be taken to overcome the constraints on increasing food production in the developing countries. The council also discussed matters relating to investment requirements for increasing food production. Also on the agenda of the council was a "Plan of Action" for World

Ministry of Education and Social Welfare
(Department of Education)

MEXICAN GOVERNMENT SCHOLARSHIPS, 1980-81

Applications on prescribed form are invited from Indian nationals for the award of four scholarships for Post-gratuate studies for 1980-81, under the Indo-Mexican Cultural Exchange Programme, offered by the Government of Mexico in the following subject—fields:-

1) Geophysics;
2) Art and Architecture;
3) Economic Development; and
4) Latin American Studies.

DURATION:

Initially one year (10 academic months starting from 1st September, 1980) and can be extended for one more year in suitable cases.

VALUE:

(i) Tuition Fees;
(ii) Monthly Allowance of Mexican Pesos 4,500.00
(iii) Insurance against accidents and free medical attention.
(iv) 1,000 Mexican Pesos for purchase of books.

PASSAGE COST:

The cost of passage from Mexico to India will be born by the Mexican authorities. Subject to availability of funds, the passage cost from India to Mexico may be met by the Government of India provided the candidate is eligible under the rules, otherwise the outward passage cost will be borne by the candidate or his/her employers/sponsors.

AGE LIMIT: Below 35 years as on 1.9.1980.

QUALIFICATIONS:

For S. Nos. 1), 2) and 3):

Uniformly good academic record, with Master's Degree in the subject selected.

For S. No. 4):

Uniformly good academic record, with Master's Degree in Economics, History, Political Science, Sociology and Social Anthropology.

Candidates should have a basic knowledge of Spanish Language, that is, a reasonable proficiency in speaking and writing the Spanish Language and be able to converse.

ESSENTIAL EXPERIENCE:

At least two consecutive years teaching/research/practical experience in the subject field selected after the prescribed qualifications (M.Phil./Ph.D. will be counted towards 2 years experience).

Note: (1) Only candidates with 60% marks and above at Post-graduate level are eligible. Where grades are mentioned, the candidates must indicate the conversion formula adopted by the University/Institution.
(2) Equivalent foreign degrees will be considered.
(3) Candidates who have already been abroad for study/training/specialisation/research on a scholarship or their own, are eligible to apply only if they have been in India for at least three consecutive years after their return from abroad.

Last Date: For supply of application forms 29-9-1979.
For return of completed forms: 4-10-1979.

For application forms and other particulars, apply enclosing unstamped, self addressed envelope (23 cm × 10 cm) and superscribing on the envelope 'MEXICAN GOVERNMENT SCHOLARSHIPS, 1980-81' to:—

Ministry of Education and Social Welfare
(Department of Education)
Section ES-1
Room No. 514, 'B' Wing,
Shastri Bhavan,
New Delhi—110001.

Note: I Applications in subject-fields other than those specified above will not be considered.
II Candidates who do not possess the requisite qualifications need not apply.
III Applications which do not contain Postal Order (or do not mention the number and date of Postal Order which has been sent alongwith the original application sent through proper channel, where necessary) will not be considered.

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Food Security for the 1980s. During his tour, Mr Singh exchanged views with officials of the US department of Agriculture at Washington.

IMF Gold

According to the International Monetary Fund its auction of 444,000 ounces of gold on September 5, fetched a record average price of $333.24 an ounce. This compares with the late fixing in London of $329.00 as the metal continued its dramatic rise on world bullion market. The sharp increase in the price over recent weeks prompted strong demand at IMF auction with bids received totalling 1.64 million ounces. Those accepted were in a range of $332.01 to $333.50 an ounce, which resulted in net proceeds of the auction of $128 million.

Padmini Dearer

The Premier Automobiles has increased the price of their Padmini (Fiat) by 8.50 per cent from September 3. The ex-showroom price of the Padmini car here has gone up to Rs 48,189 from Rs 44,372. The ex-showroom Bombay price for their cars to be converted to taxis has been hiked to Rs 44,491 from Rs 40,971.

Names in the News

Mr A. C. Sheve Gowda was elected president of the United Planters Association of Southern India for 1979-80 at its annual conference held recently. **Mr K. H. Tanna** was elected vice-president.

Mr S. N. Banerjee has been appointed as the chairman of the board of directors of Clarion Advertising Services Ltd from August 9, 1979. The new board of directors comprises, apart from Mr Banerjee, **Mr Prasanta Sanyal**, vice-chairman and managing director, **Mr Satyajit Ray** and **Mr F. S. Mulla.**

The board of the company adopted a resolution on July 3, 1979, recommending the appointment of **Mr Subroto Sengupta** as managing director from October 1,1979 after the retirement of **Mr P. Sanyal** on September 30. Mr Sengupta who retires on March 31, 1980 will be succeeded by **Mr Dilip Sen** as managing director from April 1, 1980.

Mr K. V. Srinivasan was elected president of the All-India Manufacturers' Organisation (AIMO) for 1979-80.

Mr V.P. Sarma, General Manager (Finance) of Bharat Earth Movers Ltd (BEML) has been appointed as the Director (Finance). He joined the Indian Defence Accounts Service in 1958 and had varied experience in key posts such as Assistant Fnancial Adviser, before joining BEML in 1970.

Mr V.P. Sarma

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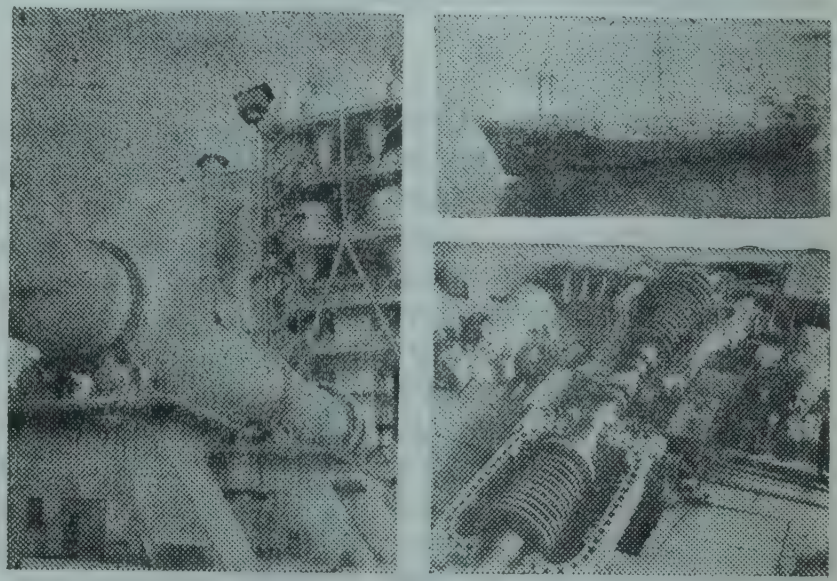

EXPORTS :

—Plants and complex installations for the production of equipment and installations in the field of mechanical engineering electrical engineering and electronics, licences and manufacturing technologies, the relevant CKD.

—Thermoelectric power plants, thermal power stations, district heating plants, hydroelectric power plants, hydromechanica equipment, the relevant individual equipment and outfits spare parts.

—Metallurgical and iron and steel installations.

—Food industry installations.

—Cement lines, various individual equipment and outfits, spare parts.

—Studies, designs, know-how, engineering, production line technologies for the above mentioned erection, technical assistance, training and other services related to the above lines factories and plants.

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COMPANY AFFAIRS

General Electric

The General Electric Company of India Limited has reported lower sales at Rs 44.34 crores for the year ended March 31, 1979 as against Rs 59.91 crores for the previous year. The directors' report says that these figures are not comparable since the company has discontinued certain trading activities in order to comply with FERA guidelines. The board claims that the company is now well placed to take advantage of the opportunities which exist to expand its sales of established products and develop markets for its new products. Its performance in these respects will naturally be watched with interest, especially as Rs 1.22 crores has been spent during the year on the modernisation of factories with a view to meeting the expected higher demands for the company's products.

The company has obtained industrial licences for flameproof switchgear and other switchgear products. These licences are now being implemented, while expansion licences for special purpose transformers, high speed DC circuit breakers and air pollution control equipment are being processed with the central government. The manufacturing activities of the company in the core sector having reached a level in excess of 75 per cent of the total activities, the final approval of the Reserve Bank of India under FERA is awaited.

Pre-tax profit at Rs 3.21 crores is appreciably less than the corresponding Rs 3.82 crores for the year ended March 31, 1978. After provision for taxation and transfers to investment allowance and development rebate reserves, the balance available for appropriation comes to Rs 1.35 crores (Rs 1.51 crores). The directors have recommended the maintenance of the dividend at Rs 1.20 per equity share absorbing Rs 86.40 lakhs; the general reserve benefits to the extent of Rs 48 lakhs (Rs 65 lakhs).

Orient Paper

Orient Paper and Industries Ltd, is taking steps to set up a plant for the manufacture of portland cement for which it has been granted an industrial licence. Orders for machinery and some other mining equipment have been placed. Applications for acquisition allotment of land, grant of mining lease and railway siding have also been made.

The board of director has recommended a 17.5 per cent dividend for the year ended March 31, last—the same as that paid for the previous year.

Production during the year was 1,17,240 tonnes, as against 1,29,479 tonnes in the previous year. The setback to production was caused by the labour indiscipline, go-slow tactics, mass absenteeism, sit-in strike, intimidation, etc. in the paper mill at Amlai, followed by an illegal strike. The production at the paper mill at Brajrajnagar was normal.

The company has added some more sophisticated equipment in its research institute at Amlai to facilitate better research. The pulp mill has been redesigned to produce bleached pulp from rags, hemp, cotton stalk, etc., as also from bamboo or other forest and or agricultural residues.

The final report regarding the project findings on agricultural utilisation of pulp and paper mill waste water project undertaken in collaboration with the National Environmental Engineering Research Institute shall be received by the end of this year.

Pest Control India

Pest Control India (P) Limited (PCI), a leading pest control organisation with 25 years of service to its credit in rodent, termite, weed, vector and marin pest control and in such other fields as disinfestation, fumigation, sterilisation, carpet treatment, etc, has diversified itself into production and marketing of several products connected with its service facilities. It has recently introduced in the market a locally manufactured Pest-O-Flash, an electrically operated flying insect control system for all kinds of industries. A miniature model of this system for homes is being developed. The industry model, costing around Rs 2,000, is composed of "black light" lure, an electrified grid and a collection tray in an aluminium anodised housing that fits into any decor.

The other products which the company is marketing or intends to market in the near future include : (i) etoxide 'C' and feroxide (gaseous sterilants used for sterilising a variety of heat sensitive products both for hospitals and pharmaceutical use); (2) sterilising equipment (for gas sterilisation); (3) chemical indicator strips (for sterilising systems utilising ETO gas and steam, PH hardness and chlorination of water); (4) sterifume technique (a treatment for rendering an aseptic atmosphere in hospitals and pharmaceuticals within 6 hours); (5) TBS microbicidal solution (a solution which can be applied on surfaces in sensitive areas like operation theatres, sterile filling areas, etc, in the form of sprays, paints or floor swabs): (6) safety and first aid equipment; (7) alginol (for the control of algae and fungi in cooling towers, etc, where blocking of conduits causes a great deal of loss of heat transfer and involves expenditure for cleaning); (8) avirep bird repellent (for structures); (9) RODAFARIN (a safe and effective anticoagulant based on world renowned WARFARIN); (10) E.D.B. ampoule (a safe yet effective fumigant to be used by laymen for their grain storage structures); (11) household insecticides (in the form of sprays, aerosols, etc,); and (12) wood preservatives.

The manufacture of these items has been fostered as an import substitution measure.

Mukand Iron

Mukand Iron and Stee
Works has shown a marke
improvement in its performanc
during the year ended June 30
1979. Its gross profit has sho
up to Rs 4.44 crore from R
1.61 crore for the earlier perio
of 15 months ended June 3

1978. Sales have touched a record level of Rs 65.90 crore from Rs 46.67 crore for the earlier 15-month period.

The company's performance during 1977-78 was considerably affected because of the stoppage of production at Kalwe unit due to labour trouble. Thus, the company has more than recovered the ground and sales have improved in the preceding year. Its performance during 1978-79 would have been still better but for the severe power cut in May and June and lumpsum payment of about Rs 1.50 crore to employees following settlement with them.

Increased Dividend

The directors have proposed to step up the equity dividend to 10 per cent for 1978-79 from six per cent paid for the previous period.

The company's pre-tax profit for 1978-79 amounts to Rs 3.16 crore against Rs 5.63 lakh after providing Rs 1.28 crore(Rs 1.55 crore) for depreciation. A sum of Rs 1.40 crore (nil) is provided for taxation, and Rs 17 lakh (Rs 4 lakh) for investment allowance. This leaves a disposable profit of Rs 1.60 crore. The proposed dividend will claim Rs 80.74 lakh (Rs 48.44 lakh). A sum of Rs 8 lakh (nil) is transferred to the debenture redemption reserve and Rs 71.21 lakh to the general reserve.

The company proposes to embark upon a Rs 4-crore modernisation programme for its wire making facility at Kalwe.

The company's exports increased to Rs 3.80 crore in 1978-79 from Rs 2.30 crore mainly due to export of about 5,000 tonnes of pre-stressed concrete wires to China. The company is exploring markets for export of non-traditional castings and railway casting.

FICOM

FICOM Organics, a new company promoted by a leading merchant banking firm of H.L. Financial Consultants and Management Services (FICOM), is setting up a Rs 1.89-crore project for the manufacture of malathion technical grade. The company's project, which is being implemented in technical collaboration with Excel Industries of Bombay, is being located at Ankleshwar, a notified backward area of Gujarat. The company will have a capacity to produce annually 1,000 tonnes of malathion technical grade, a pesticide having considerable demand.

Excel Industries has already given such a technical collaboration to Punjab United Pesticides, which is successfully running its plant for the past few years.

The project cost is being met from the share capital of Rs 55 lakh, state and the central government subsidies of Rs 20 lakh and loans of Rs 114 lakh from the GIIC, ICICI and GSFC. Excel Industries is also subscribing to the company's shares.

Hindustan Dorr-Oliver

Hindustan Dorr Oliver has announced an interim dividend of 20 per cent for the year ending November 30, 1979. The company had paid only one dividend of 37 per cent during the previous year. The interim report in respect of the current working shows a gross profit of Rs 1.63 crores on a turnover of Rs 9.03 crores for the first eight months as against a profit of Rs 1.93 crores on a turnover of Rs 10.78 crores achieved in the previous full year. After providing Rs 3.25 lakhs (Rs 2.75 lakhs) for depreciation and Rs 117.70 lakhs (Rs 144.20 lakhs) for taxation the net profit is Rs 42.08 lakhs against Rs 45.63 lakhs of 1977-78. Out of this, a sum of Rs 8.03 lakhs (Rs 4.57 lakhs) has been set aside for transfer to statutory reserve.

Somaiya Organics

Somaiya Organics (India) has shown improved performance for 1978, with a higher production of butanol and butyl acetate and better price realisation. On sales of Rs 3.25 crores against Rs 3.01 crores the company has earned a profit of Rs 30.35 lakhs against loss of Rs 44,223 shown in the previous year. The profit has been carried over to the balance sheet. No depreciation has been provided for in the accounts. Arrears on this account now amount to Rs 3.19 crores. The management's efforts to procure a larger allotment of alcohol have now yielded results. The UP government has agreed to increase the allotment from 13.5 million litres to 22.5 million litres per year on a tax-free basis, provided additional manufacturing facilities are installed for the purpose. The company is working out a detailed scheme for submission to the bank and financial institutions for additional financial requirements.

South India Shipping

The directors of South India Shipping has once again skipped the dividend. According to preliminary figures, the company has earned a gross profit of Rs 3.62 crores. With depreciation requiring Rs 2.13 crores the net profit is Rs 1.49 crores. After adjustment of Rs 29.72 lakhs in respect of the prior year, the surplus of Rs 1.78 crores has been transferred to general reserve.

Hind Rectifiers

Hind Rectifiers which skipped the dividend for the year, 1977-78 is paying 12 per cent for the year ended March 31, 1979. The company's turnover has increased from Rs 3.34 crores to Rs 3.76 crores and the gross profit has gone up to Rs 32.57 lakhs from the previous year's Rs 30.55 lakhs. After providing Rs 3.28 lakhs (Rs 3.43 lakhs) for depreciation, Rs 0.06 lakhs (Rs 0.11 lakhs) for investment allowance and Rs 5.33 lakhs (Rs 0.58 lakhs) for tax liability, the net profit is Rs 23.66 lakhs against Rs 26.42 lakhs. Out of this, Rs 3.05 lakhs has been utilised to wipe off the loss brought forward from the previous year and Rs 3.60 lakhs has been set aside for payment of the proposed dividend.

Gabriel India

The directors of Gabriel India have announced a 10 per cent dividend for the year ended May 31, 1979 on the enhanced share capital of Rs 2.64 crores spread over 19,500 shareholders. The dividend will absorb Rs 23.01 lakhs (Rs 11.40 lakhs). The shareholders, who got equity shares in September 1978 will be eligible for prorata dividend.

The company's distributable profits have doubled to Rs 40 lakhs (Rs 20 lakhs). The net sales at Rs 5.11 crores (Rs 3.99 crores) show 28 per cent growth and the gross profit, before depreciation and taxation, at Rs 84 lakhs (Rs 54.81 lakhs) registers an impressive growth of 53.26 per cent. After providing for depreciation of Rs 10.47 lakhs (Rs 9.58 lakhs), pre-tax profits amount to Rs 73.53 lakhs (Rs 45.23 lakhs) —an increase of 62.57 per cent. No tax liability has been provided for 1979 in view of the tax benefits available to the company. With investment allowance reserve absorbing Rs 34.20 lakhs (Rs 1,000 only) and some adjustments, the distributable profit is Rs 40.01 lakhs.

According to the managing director the bearing division of the company located at Parwanoo, a notified backward area in Himachal Pradesh, is at the take-off stage. Production has commenced in both the powder and the strip plants. Trial production of bearing has been started and these bearings are undergoing various tests at both the field and plant levels. These products are stated to be launched in the market before 1979 runs out.

Gujarat Aromatics

Gujarat Aromatics project is nearing completion and trial runs are expected to be undertaken soon. The directors hope that the plant will start commercial production by the end of this year. There has been an overrun in the estimated project cost from Rs 9.50 crores to Rs 10.50 crores due to delay in the implementation of the project and increased costs. The company is seeking additonal loans from financial institutions to finance the overrun.

According to the directors, synthetic cresol is in short supply in the international market and its price has increased. This has strengthened the feeling that it will not be difficult to market at least 3,000 tonnes of cresol in the first year, as originally envisaged. The company has secured a licence to import 250 tonnes of cresol to undertake a seed marketing programme.

Usha Martin Black

Usha Martin Black has secured the necessary permission of the government for issue of 11 per cent debenture as "rights" to its existing shareholders.

It will offer 10 debentures of Rs 100 each to the members holding 245 equity or preference shares as on September 25.

Welcast Steels

Welcast Steels has shown a gross profit of Rs 8.76 lakhs on sales of Rs 1.59 crores for the 15 months ended March 31, 1979, as against a loss of Rs 7.17 lakhs on sales of Rs 94 lakhs in the previous 12 months. After making necessary provisions, there is a net profit of Rs 3.09 lakhs compared to a net loss of Rs 11.73 lakhs. The profit has been adjusted against the accumulated loss of Rs 22.61 lakhs. Sales during the first quarter of the current year have been Rs 54 lakhs representing an increase of 20 per cent over the preceding quarter. The directors are optimistic of wiping out a considerable part of the carried forward losses by the end of this year.

Amalgamated Electricity

The Amalgamated Electricity Co, Bombay, has reported a gross profit of Rs 49.40 lakh for 1978-79 against Rs 51.62 lakh in the previous year. The net profit is, therefore, lower from Rs 15.18 lakh to Rs 11.50 lakh, after providing Rs 6.74 lakh (Rs 15.84 lakh) for depreciation, Rs 24.86 lakh (Rs 16.67 lakh) for taxation, and Rs 6.29 lakh (Rs 3.93 lakh) for investment allowance. The other provisions are Rs 19,000 (Rs 34,436) for retrenchment compensation reserve, Rs 69,117 (Rs 3.37 lakh) for contingencies reserve Rs 5.60 lakh (Rs 2.91 lakh) for deferred taxation reserve, and Rs 8.33 lakh (Rs 9.72 lakh) for dividends. A sum of Rs 1.42 lakh (Rs 7.65 lakhs) has been carried forward.

Laxmi Starch

Sales of Laxmi Starch, Kundara, Kerala, increased substantially from Rs 711.19 lakh to Rs 777.69 lakh in the year ended March 1979. The company made a profit of Rs 13.60 lakh, against a loss of Rs 1.52 lakh, after providing Rs 15.17 lakh (Rs 13.93 lakh) for depreciation, and Rs 3.61 lakh (Rs 11.25 lakh) for investment allowance reserve. Other provisions are Rs 4 lakh (nil) for debenture redemption reserve, Rs 5.14 lakh (nil) for general reserve no 1 and Rs 6.05 lakh (Rs 1.25 lakh) for dividends.

Venkateshwara Hatcheries

Venkateshwara Hatcheries, Pune, one of the leading hatcheries in the country, is having collaboration from Babcock International Corporation and Cobb Incorporated of the US for setting up a Rs 2-crore basic poultry breeding project near Pune.

This is for the first time that both Babcock and Cobb will have basic breeding programmes anywhere outside the US.

According to Mr V. B. Vasudeva Rao, managing director, Venkateshwara Hatcheries, a new company with foreign capital investment as permitted under FERA rules, will be formed. Basic breeding stocks from the US are to be imported around mid-1980, for development within India. The project will produce in India breeder stocks of internationally known Babcock B 300 white egg layer, the B 380 brown egger and the Cobb 100 broiler.

Under the agreement with the two companies, poultry breeding stocks will be produced in India not only for the ever increasing national needs but also for export to the middle-east and the far-east countries.

Rohit Pulp

Rohit Pulp and Paper Mills, which reported a marked improvement in its performance during 1978-79, hopes to show satisfactory results for the current year. The management hopes to improve further its product-mix and realise higher selling prices to offset increase in costs.

The company's production during the first four months of 1979-80 has been placed at 5,565 tonnes against 4,563 tonnes in the corresponding period of last year. The increase is largely due to the fact that the company's new duplex board plant had started working to its optimum capacity only during the second half of the last year. Production showed a significant rise to 15,759 tonnes during 1978-79 from 9,608 tonnes in the previous year. The overall production for the whole of the current year may not show a marked increase over 1978-79, the directors state.

Operations during 1978-79 have resulted in a higher gross profit of Rs 90.24 lakh against Rs 33.16 lakh for the previous year. Sales have increased to

Rs 8.52 crore from Rs 4.69 crore.

The company's net profit amounts to Rs 65.82 lakh against Rs 14.66 lakh after providing Rs 24.42 lakh (Rs 18.50 lakh) for depreciation. The company, as in the preceding year, does not expect any tax liability for 1978-79. The directors have proposed to step up the equity dividend to 14 per cent for 1978-79 from 12 per cent paid for the previous year. They have also recommended a bonus issue in the ratio of three for five equity shares held.

Kerala Acids

Kerala Acids and Chemicals, a new company setting up a plant at Edayar in Kerala, is expected to enter the capital market shortly with a public issue of Rs 41.65 lakh divided into 4.16 lakh equity shares of Rs 10 each. The company is licensed to produce 1,200 tonnes of formic acid and 1,500 tonnes of sodium sulphate per annum. The project is estimated to cost Rs 2.32 crore. The plant is expected to commence production by July, 1980.

The project cost is being met from the share capital of Rs 85 lakh and term-loans of Rs 147 lakh. The company's promoters have subscribed for equity share worth Rs 33.65 lakh and the Kerala State Industrial Development Corporation has taken up equity shares of Rs 9.35 lakh.

Promoters are of the view that there is wide gap between the demand and supply of formic acid, the company's major product. Formic acid is mainly used in rubber, pharmaceuticals, leather and textiles industries. The demand for this chemical from the rubber industries would be around 1,200 tonnes, from the pharmaceuticals about 800 tonnes and from the leather industry about 1,500 tonnes by 1980. The company, which will produce formic acid and other products in technical collaboration with a German firm, does not visualise any problem in procuring raw materials.

Reliance Jute

The pre-tax profit of the Reliance Jute and Industries Ltd has amounted to Rs 29.96 lakh for the year ended March 1979, against Rs 29.99 lakh in the previous year, after providing Rs 25.59 lakh (Rs 24.44 lakh) for depreciation. A taxable ordinary dividend of 14 per cent (12.5 per cent) has been declared absorbing Rs 14.94 lakh (Rs 13.34 lakh). A sum of Rs 1.36 lakh (Rs 6,594) form provision for taxation no longer required and another sum of Rs 7.30 lakh (Rs 6.09 lakh) for development rebate reserve have been taken into account. Allocations include Rs 18.26 lakh (Rs 11.30 lakh) for taxation, Rs 2.74 lakh (Rs 8.28 lakh) for investment allowance reserve and Rs 1.59 lakh (Rs 1.41 lakh) for general reserve. Sales were Rs 10.29 crore against Rs 10.35 crore.

Kusum Products

Kusum Products Ltd has shown good results for the year ended March 1979. Total turnover is up from Rs 14.62 to Rs 17.18 crore and the gross profit has risen from Rs 15.44 lakh to Rs 36.13 lakh before providing for depreciation and taxation. A taxable ordinary dividend of 10 per cent has been declared. A sum of Rs 6.40 lakh has been provided for taxation. The net profit has amounted to Rs 15.45 lakh against Rs 2.70 lakh in the previous year.

Simco Meters

Simco Meters has received a set back in its working for the year ended March 1979. The gross profit has fallen to Rs 14.24 lakhs from Rs 32.32 lakhs. The equity dividend has been maintained at 12.5 per cent. Allocations include depreciation Rs 5.95 lakhs (Rs 5.13 lakhs), investment allowance/development rebate reserve Rs 2.22 lakhs (Rs 0.81 lakhs) and taxation Rs 3.40 lakhs (Rs 13.50 lakhs).

Indian Resort Hotels

The working results of Indian Resort Hotels for the year ended June 1979, are satisfactory and have shown a considerable improvement over those of the previous year. The company has decided to pay an interim dividend of Rs 2 per share, which will absorb Rs 13.00 lakhs and will be paid out of the profits for the year. Last year, it had paid a dividend of six per cent.

Sehgal Papers

Sehgal Papers has reported that sectionwise trial runs of its carbonless copy paper plant have been successfully undertaken and commercial production of this paper for the first time in the country is expected to start soon.

The company has been experiencing power shortage and has decided to instal an extraction type steam turbo-alternator set, instead of condensing turbine, which is the most economical method of generating power today. Financial institutions have agreed to advance an additional Rs 4.10 crores in term loans for the extraction type set.

The performance of all machines has been very good and capacity utilisation is currently more than originally envisaged.

The company has already successfully exported its soft and absorbent tissue paper against stiff international competition in quality and price and has several additional orders and inquiries in hand.

Universal Dyestuff

Universal Dyestuff Industries has turned out good working results for the year ended March 1979. Sales have gone up from Rs 3.97 crores to Rs 6.37 crores and the gross profit has nearly doubled to Rs 93.51 lakhs from Rs 48.90 lakhs. The equity dividend has been increased to 15 per cent (Rs 3.75 on a share of Rs 25). Last year, it paid a dividend of 12 per cent.

Capital and Bonus Issues

The following four companies have been authorised to raise capital as under. Name of the company and particulars of issues are:

Bonus Issue

The Standard Chemical Company Pvt Ltd: Rs 6,75,000 of Rs 100 each in the ratio of 1:1.

Hindustan Syringes Pvt Ltd: Rs 3,13,000 of Rs 100 each in the ratio of 9:10.

Further Issue

William Goodactre and Sons India Ltd: Equity shares of Rs 6,00,000 against rights debentures for cash at par, to promoters, directors and their friends and relatives to meet the working capital requirement.

Rural Electrification Corporation Ltd: Issue of bonds worth Rs 18.25 crores (with a right to retain excess subscription up to 10 per cent of Rs 18.25 crores) for cash at par to the general public through a prospectus.

FORM—IIA

NOTICE

It is hereby notified for the information of the public that Shriram Bearings Limited, Delhi proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval for the establishment of a new undertaking for the production, supply, distribution or control of the undermentioned goods with the installed capacities/estimated annual production indicated against each of them :—

Goods	*Million Nos. per annum*
1. Needle Roller Unit Cages/Thrust Cages and their assemblies	1.5
2. Shell type Needle Roller Bearings and their assemblies	1.2
3. Needle Roller Bearings and Combined Needle Roller/Thrust Ball Bearings and their assemblies	0.9
4. Roller/Needle Bearing assemblies for spin spindles	0.5
5. Roller/Needle Bearing assemblies for spindle inserts	0.3
6. Needle Rollers	200.0

Other particulars of the proposed new undertaking are as under :—

(i) Name of the proposed undertaking — Shriram Needle Bearing Industries Limited

(ii) Name (s) of person (s) or authority/authorities proposing to establish the new undertaking. (Where it is a body corporate, furnish details of its management structure together with those of the proposed undertaking). — Shriram Bearings Limited

Management Structure

The Board of Directors of the Company consists of :—

1. Dr. Bharat Ram (Chairman)
2. Lala Shri Dhar (Vice Chairman & Mg. Director)
3. Shri Hans Raj Gupta
4. " T.R. Gupta
5. " S.L. Kirloskar
6. " D.C. Kothari
7. " S. Ratnam
8. " S.N. Bilgrami
9. " P.L. Kumar (IFC Nominee)

Management Structure of proposed undertaking

Dr. Bharat Ram, Lala Shri Dhar and Shri S. Ratnam are the first Directors of Shriram Needle Bearing Industries Limited, which will implement the project.

(iii) Capital structure of the applicant person or authority and of the proposed undertaking

Capital structure of the applicant Company

Authorised Capital	*Rupees*
15,00,000 equity shares of Rs. 10 each	1,50,00,000
50,000 preference shares of Rs. 100 each	50,00,000
TOTAL	2,00,00,000

Issued, Subscribed and Paid-up Capital	*Rupees*
5,50,000 equity shares of Rs. 10 each	55,00,000
20,000 11% Cumulative Redeemable Preference shares of Rs. 100 each	20,00,000
TOTAL	75,00,000

Capital Structure of the proposed undertaking

Authorised Capital	
15,00,000 equity shares of Rs. 10 each	1,50,00,000
5,00,000 Unclassified shares of Rs. 10 each	50,00,000
TOTAL	2,00,00,000

Issued, Subscribed and Paid-up Capital	
7 equity shares of Rs. 10 each have been taken up by the subscribers to the memorandum	70
TOTAL	70

(iv) Proposed location of the new undertaking

Place — Ratu
District — Ranchi
State — Bihar

(v) Brief outline of the cost of the project, the scheme and source of finance

Cost of the Project	*Lac Rs.*
Land/Building	25.0
Plant & Machinery	390.0
Other Assets	35.0
TOTAL	450.0

Scheme and Source of Finance	
Fresh issue of Capital	150.0
Loans from financial institutions	300.0
TOTAL	450.0

2. Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhawan, New Delhi within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

Dated this ninth day of September, 1979

SHRI DHAR
Managing Director
Shriram Bearings Limited
DCM Premises, Bara Hindu Rao,
Delhi-110006.

The Tata Power Company Limited

CHAIRMAN'S STATEMENT

The following is the summary of the Statement of Mr. Naval H. Tata, Chairman of the Tata Power Company Limited, for the year 1978-79. The Annual General Meeting will be held on Thursday, the 20th September 1979 at 2.30 p.m. at the Tata Auditorium.

TO
THE MEMBERS

In presenting our annual report to the shareholders, it has been our traditional practice to dwell specifically on factors relating to the operation of the electric power generation industry. In doing so, we also refer incidentally to the general economic environment in the country, under which the industry operates. At the present juncture, when the country is faced with an unprecedented crisis in terms of electric supply, such a practice becomes a compelling necessity. As one of the principal elements in Maharashtra's electric grid, our views on the subject have some relevance.

Our national plans for the supply of electric power have traversed a tortuous course over the past years. We seem to have embarked on preparing numerous projects with high expectations. In this mood, our planners have unconsciously ignored the mounting cost escalations occasioned by delay and indecision, on the part of those responsible for the final approval of the projects, taking a tremendous toll of the nation's scarce resources. The tragedy does not terminate at that point. The industrial and agricultural consumer, starved of his legitimate motive power through normal source is unwillingly forced to meet at least 20.30% of his energy requirements from hurriedly improvised captive generation at an exorbitant cost. Those who have not the resources to do so. suffer heavy production losses to the detriment of the nation's agricultural and industrial development. Despite intensive deliberations, we seem to have failed in the elementary task of taking positive steps to regulate fuel supplies to thermal stations. We seem to have also failed to strengthen the quality of maintenance of our power stations, nor have we endeavoured to improve the quality of indigenously produced generating equipment and its components to the satisfaction of the operating units.

On the subject of fuel, the complaint of non-availability of coal at thermal power stations has provoked contradictory reactions and explanations. The State controlled coal mining industry keeps on claiming that there are adequate quantities of coal at the pit-heads, but no rolling stock is available to lift them. On the other hand, the Railway authorities keep assuring the public that inadequate supplies are due to coal raising and loading problems. They point out that wagons are lying idle, awaiting coal loading at the pit-heads. The tragic results remains that numerous generating stations starved of coal have been operating on a hand-to-mouth basis in a precarious manner, imparting uncertainty to an industry which must at all cost maintain a reliable supply of power. To add to their woes, the quality of coal is often of sub-standard variety causing serious damage to boiler equipment. Such a chaotic situation calls for a drastic review of our present policies of linking certain coal mines with particular thermal stations. Can we not consider the establishment of coal storage dumps at suitable appropriately located centres, from where specially ear-marked trains could pick up the required quantities of coal? There is also a need to cut down the turn-around time at the points of loading through more modern mechanised handling systems. Unless we do so, with more generating capacity brought under commission progressively, greater demand would render fuel supplies critical. In the absence of improved methods of handling. I am afraid that continued shortages will lead to corrupt practices in the sphere of the coal supply trade which should be avoided at all costs.

As more super thermal power stations with sophisticated technology become operative in the country, the infrastructures for fuel systems, particularly coal, should not remain static, antiquated or inefficient. Hence there is a crying need for more modern highly automated systems of coal raising at some sacrifice of manual labour in the larger interests of efficiency, higher productivity and greater safety in the coal mining industry. Hence, the establishment of coal washeries assume prime urgency, in order to improve the quality of coal, which today unfortunately has an ash content of 40-50%. The ultimate advantage of beneficiation of coal through washeries is considerable, in terms of more efficient operation and saving in transport of almost 50% per wagon Through improved quality of coal, the current generating capacity of thermal stations languishing at about 50% could be stepped upto 80-85% of consistent operating efficiency. The additional costs involved will more than justify the benefits derived from such improved efficiency of operations.

In the context of the present power crisis, your Company's presistent efforts in pressing for an early decision to instal a 500 MW thermal generating unit at Trombay, are fully justified. It needed no prophecy nor a gift of premonition, since on the face of it, our country's plans for augmenting supplies were not keeping in step with the growing demand. Whilst the 500 MW unit, despite delays of indecision, would relieve the energy shortage of Maharashtra considerably, we should not rest on our oars but continue to consider the need for replacement of those thermal units of the State which have far outlived their normal rehabilitated life span. It would, in fact, be worthwhile exploring the feasibility of installing larger units, which can offer more efficient and economic operation at our Trombay Thermal Station, in replacement of the present three units of 60 MW each. Although these old units may have completed 25 years of service by virtue of the fact that they have been so well-maintained, they could still be useful in certain backward areas which are energy starved or are served inefficintly by units smaller than 60 MW.

If we have to solve our country's problem of energy shortages expeditiously, then I must once again revert to a topic of a meaningful co-existence between the private and the public sector in augmenting our power resources. It is unfortunate that in some influential quarters, inspired by ideological considerations, there are leaders who still advocate the philosophy of confining the electricity industry to the public sector only. In doing so, they fail to realise that this is not an area where the entry of the private sector will deprive the State of its legitimate right in the field of public utility. The current power famine is of such a magnitude that with all the resources of the State Electricity Boards put together, it would not be enough to tackle the total demand. Hence, there is ample scope for both.

I am happy to report that even under the present crisis, the performance of your Company's generating plants has been encouraging. The Trombay Thermal Station recorded the highest generation in its 23-year history, and its utilisation factor was 7112 KWH/KW installed and from its latest 150 MW unit 7667 KWH/KW. If we have been able to achieve this, it is largely due to the quality of maintenance and the efficiency of our technical and administrative sections, which in no small way have been responsible for the renewal of our licences for the generation and distribution of electricity. We are indeed grateful to the Maharashtra Government for having appreciated our contribution from the pioneering days of the late J.N. Tata, our Founder, to the present stage in developing the generating resources of the State, in order to foster and promote the energy requirements of industry and agriculure. I wish to assure the Chief Minister and his Cabinet colleagues that we will continue to discharge our obligations and play our role as as an integral part of the Maharashtra power system. We would coninue to direct our energies in ugmenting our capacity progressively whilst maintaining the eliability of power supply, in rder to maintain Mahaashtra's status of the premier tate in the sphere of industry nd trade. I wish to assure ne Government of Maharahtra that we will continue to perate with the same dedicaon in our sphere of activity nd continue to maintain our traditional efficiency in the ope of maintaining the fund f goodwill which exists between the State and our Company.

Our relationship with the State Electricity Board continues to remain cordial, thanks to its Chairman, Mr. S. N. Misra and his colleagues. It is no exaggeration to state that, but for the understanding and mutual co-operation that exists between us, the difficult task of facing the acute energy shortages could not have been handled effectively with the minimum of inconvenience to all categories of consumers.

I do hope that our consumers have appreciated the fact that through circumstances beyond our control, the normal production of most industrial units in the Western Maharashtra Grid could not be maintained on account of statutory restrictions on power supply which the Government had to impose from time to time. I take this opportunity to thank all our consumers who under such trying conditions extended their unstinted co-operation to us. It is extremely creditable to note their disciplined response to the frequent, and sometimes sudden calls for economy in power consumption during periods of critical system operation.

You are perhaps aware of the increasing stress put on the need of evolving realistic tariff rates which could in the long run create adequate national resources for financing the expansion of the country's energy resources. This approach has been highlighted by Mr. V. G. Rajadhyaksha, Member, Planning Commission, recently. He has emphasised the need for enhancing electricity tariffs to make energy generating units self-sufficient, not only in terms of operating costs but also to take care of rehabilitation, replacement and continued growth of power generating units. This policy has found an echo in a recent report of the World Bank. Even penal rates for peak hour consumption and subsidised rates for off-peak consumption have been suggested.

In an all-out effort to combat the energy shortages which stare the nation in the face, there is an urgent need for conserving energy at all costs. Thus, it has become a compelling necessity to educate the public and industry in utilising the available resources in the most judicious manner. It is evident from world trends that the demand for electricity will not only outstrip its availability, but that generating costs will progressively increase. Conservation does not merely mean the maximum utilisation of the avilable energy with minimum waste. It has to be looked upon from a constructive new angle. In that context, our architects, town-planners, industrial engineers and trend-setters in various walks of life will have to give a lead in economising the use of electrical energy, which is fast becoming a scarce commodity. Undoubtedly, this is one subject which calls for considerable research and development in order to yield meaningful results. Your Companies have a Task Force of competent experts in energy audit and optimisation. They can help in salvaging any likely waste of energy in your industrial units. They can help the process manager in making him conscious of the need of conserving energy.

In the challenges which face us in the future, there is a need for alternate energy sources, apart from captive emergency reserve. There are immense possibilities for captive generation from gas turbines on a co-operative basis. The review of the total energy needs of every industrial plant has now become necessary, particularly in view of progressively mounting costs of energy. The era of cheap and abundant energy may now be treated as over and forgotten.

Since the nation is committed to faster rural development and agricultural growth, our country will have to focus its attention on agricultural pumping loads to increase the furtility of arable land. The time has come to review the comparative merit of providing centrally generated electricity as against re-cycled non-conventional energy resources, viz. mini-hydro, bio-gas plants, gobar gas plants, wind power, solar energy etc. But such soft options can only succeed if the licensing and planning procedures for such projects are simplified and liberalised.

We have always been conscious of our obligations to society in ensuring a cleaner environment in our region. We shall continue our efforts in this direction to the best of our ability by introducing effective pollution control and monitoring equipment. However, in a developing country like ours, while new projects must fulfil all requirements for pollution control, it would be wasteful expenditure in case of existing units which are approaching the end of their useful life. To spend disproportionately high amounts for marginal benefits in terms of prevention of pollution would be a mistake. Whilst we must be conscious of pollution hazards for the quality of life, our laws must have relevance to our needs, bearing in mind the stage of industrial development we are in. Let further refinement of such laws go hand in hand with our economic progress.

As we continue to acquire progressively higher technology in our field, we endeavour to offer our engineering skills and expertise for power projects conceived in the countries identified with the Third World.

The projects undertaken by the Companies in association with Tata Consulting Engineers in Iran and Liberia and with Tata Exports Ltd. in Algeria and Tata Enterprises Overseas Limited in Saudi Arabia, are examples of sharing the fruits of transfer of technology from the dominant to the developing world for the benefit of friendly countries situated in the developing world.

In conclusion I would like to record my appreciation of the admirable performances of our officers and staff at all levels. I am sure that our shareholders will join me in expressing our gratitude to them. It is a matter of considerable pride for you to know that the senior executives of your Companies have been invited to serve on the high-level committee instituted by the Planning Commission to review the working of the power sector in India. I look forward with confidence to continued cooperation coupled with loyalty from one and all. The ultimate strength and future progress can only be derived through such co-operation and mutual respect between the employees and the management.

(Naval H. Tata)
Chairman

9th August, 1979.

India International Trade Fair, 1979
Organised by the Trade Fair Authority of India

Nov 10 to Dec 9 Pragati Maidan, New Delhi

Will be on view the products of a large number of foreign participants and a whole spectrum of India's Industrial development during the last 30 years

INDFAIR 79

"Trade for Prosperity"—with this Theme the Fair will project the achievements and capabilities of the country with future potentialities in science and technology

NATIONAL INDUSTRIES FAIR–JAN. 21 TO FEB. 3, 1980
The IITF '79 will re-open as the National Industries Fair with the Indian segment to coincide with the UNIDO conference in New Delhi, during the same period

It is a golden opportunity for businessmen, industrialists, technicians, scientists, farmers, workers, and students to see, learn and buy

davp 79/219

BOMBAY SUBURBAN ELECTRIC SUPPLY LIMITED

STATEMENT OF THE CHAIRMAN, MR. R. P. AIYER, TO THE SHAREHOLDERS OF THE COMPANY.

The year under review is of significance to the Company. It was in 1929 that the Company in its present corporate form assumed the responsibility to fulfil the obligations cast on it under the Bombay Suburban Electric License. An occasion to mark the completion of 50 years of service to the community in the Suburbs of Bombay is indeed a significant landmark. To commemorate the event, it has been proposed that a Golden Jubilee Bonus Dividend of Rs 2/- per share be paid to the Equity Shareholders along with the final dividend for the year 1978-79. What has been the performance of the Company during the last five decades and how far has it succeeded in living up to the expectations of the pioneers?

For the sake of historical perspective it would be appropriate to quote from the speech of the then Chairman to the shareholders at the First Ordinary General Meeting of the Company held on 16th June, 1930:

> "It must be a source of satisfaction to those of you who have taken note of the figures to mark the increase in the number of consumers from 943 mentioned in the Prospectus as at 30th June 1929 to 1703 referred to in the Report before you. You will no doubt appreciate that the scope which the suburban district affords to your Company's future expansion is still very considerable."

The number of consumers today stands at 5,60,455. Sales of energy have multiplied 1,300 times and fixed assets 300 times since the first year of operation. Graphs depicting the strides taken by the Company in various spheres during the last fifty years appear elsewhere in this Report. The confidence reposed on the Company by the investors and the dedicated efforts of the Company's staff have made this progress possible.

Members are aware of the uncertainty which developed over the vesting of the Company's electrical undertaking in 1976. and during the last three years this situation still appeared uncertain. The uncertainty revolved round the Company fulfilling its obligation to embark upon a generation project comprising either 2 sets of 210 MW each or one set of 500 MW. A favourable development has since been that in the month of June, 1979, the project has been forwarded to the Central Government by the State Government with their recommendation. The project as now recommended by the State Government is based on significant West Germany Credit. The Central Electricity Authority is now engaged in the technical appraisal of the project. In view of the importance of the project in augmenting the power capacity in the region it can only be hoped that the project would receive early clearance from the various authorities in New Delhi and that adequate investor response to cover the counterpart rupee finance would be forthcoming to fund the project. On the part of the Company it has adequate experience built-in over the recent past by virtue of its involvement in power station erection.

The year under review accounted for an increase of 11.95% in energy sales. To meet the growing demand the installed bulk transformer capacity was raised by 23 MVA during the year accompanied by additions to sub-station capacity to the extent of 17.19 MVA. Distribution reinforcements were also carried out in various areas. A notable development during the year has been the improvement of lighting on a section of Western Express Highway by the installation of a new design of semi-highmast poles for the first time in India.

Owing to uncertainty about the future of the Company's License, investment during the year under review in strengthening the distribution system *perforce* has had to be limited having regard to internal finance accruals. It will now be necessary to allocate a higher measure of finance for distribution development. This problem has become complex due to the recent spurt in prices of materials like cables, switchgear, meters, transformers and other essential items for power development. Although the Capital Budget for the financial year 1979-80 is slightly larger that the Budget for the previous year, the available plant and equipment, by virtue of the inflated prices, would be somewhat lower.

This lag in investment on distribution development is tending to have an adverse effect on system loss—the difference between energy purchased and energy sold. How best this loss could be controlled is receiving utmost attention.

Effective from 16th March 1979 the bulk supply rate was increased by 15% necessitating the Company, in its turn, to make appropriate rate adjustment effective from 27th March 1979. The quantum of rate increase by bulk suppliers is still the subject of discussion with the State Government and if and when the matter comes to be finally decided, and a downward adjustment in the bulk supply rate takes place, the Company would consider passing on appropriate rate reductions to its consumers.

The earnings from the Electric Supply business are in accordance with the regulatory norms, and have, in addition enabled the Company to seek approval from the State Government to enlarge the Deferred Tax Reserve, bringing this Reserve upto Rs. 126.91 lakhs.

As opportunities arise this Reserve would be augmented.

The current year's prospect for the Electricity Supply business is governed by the severe power cut the area has faced since June 1979. Depending upon the duration and the severity of the cut the Company is expected to end up during the year with not an unfavourable situation.

The Contracts Division achieved a turnover of Rs. 10 crores, an increase of 207% compared to the previous year. The Wadi Jizan Project in Saudi Arabia is expected to be commissioned by the end of October, 1979 except that energisation of a number of services is likely to spill over. The Wadi Jizan area at the South-West part of Saudi Arabia notwithstanding being verdant and water-blessed is humid with summer temperature rising in the sun up to 55°C. In spite of this harsh climate the 300-man team engaged in the project has done commendable work. A feature of the contract is that the Company will, during the twelve months following the commissioning. be responsible for guaranteed performance of the transmission and distribution network. We are grateful to BHEL, for associating BSES as a sub-contractor on the project. The Company is also likely to be awarded the contract for operation, maintenance and management of the Distribution Division of the Project during the next three years. There are prospects of additional business in the peripheral areas of the current project, and the Company is suitably equipped to undertake responsibilities for enlarged operations. In the domestic market the Company has for the first time completed an extra high voltage transmission job in Meghalaya with its difficult terrain and another similar job in the same area is continuing.

The Computer Section of the Contracts Division is being revamped with the addition of a fourth generation computer which is expected to be commissioned by early 1980. A modest beginning in software export has been made by the presentation of a System to the Dubai Electric Company.

Our thanks are due to all employees of BSES for the continued dedication in enlarging the Company's achievements and I hope we can look forward to their continued cooperation in meeting the problems ahead.

R. P. AIYER
Chairman

Bombay, 14th August, 1979.

Long-term growth trends in Indian agriculture: 1950 to 1978

Agriculture, an important sector of the Indian Economy, has made considerable progress in the third quarter of the current century. The progress, however, has not been uniform. There have been areas of notable success as also of relative failures.
An attempt has been made in the following pages to trace the year-to-year developments in some selected aspects/parameters by presenting the relevant facts in the form of a series of tables.

Technical note

Historical Background

THE FIRST series of all-India index numbers of agricultural production was compiled in the year 1949 with triennium ending 1938-39 as the base, the coverage being limited to 19 principal crops for which reliable annual estimates of production were then available. With the extension of coverage of crop estimates to more crops and improvements in the relaibility of estimates, a revised series of indices of agricultural production with the agricultural year 1949-50 as base and coverage extending to 28 principal crops was issued in 1954. For a study of trends in area under crops and agricultural productivity, the all-India index numbers of area under crops and agricultural productivity were issued in August, 1962 with the same base and coverage as for the index of agricultural production.

In view of the importance of the index numbers of agricultural production and other items for planning and policy making and the multiplicity of uses to which these indices are being put at the national and international levels, it was felt that a deeper examination of the various problems involved in the construction of different series of index numbers was necessary. Accordingly, a Technical Committee on Index Numbers relating to agricultural economy was set up in 1965 under the chairmanship of late Dr. V.G. Panse to look into the scope, coverage, methodology, etc., of various index numbers being constructed at different levels. The committee reviewed the technical details of the index numbers of area under crops, agricultural production and productivity and made some recommendations for improvements in the scope, coverage and methodology of the series. The committee further suggested the initiation of a number of new series of index numbers, such as index number of net area sown, cropping pattern, cropping intensity and productivity per net hectare.

In the light of the recommendations of the above committee, a new series of all-India index numbers of area under crops, net area sown, cropping intensity and pattern, crop yields, productivity per hectare and agricultural production with the triennium ending 1961-62 as base was compiled. It has been issued by the Directorate of Economics and Statistics since 1972.

This committee had also recommended that "in view of the rapid changes in cropping pattern, etc., the base period of indices should be revised once every five years or at the most ten years". This question was examined and a new base period (triennium ending 1969-70) was selected in 1977 for the all-India revised series. Details of the revised series are discussed below:

Base Period: Agricultural production is greatly affected by uncertain factors like rainfall, temperature, floods etc,, and is, therefore, subject to large fluctuations from year to year. As such, for study of trends in area, production, etc., the base period should generally be broad-based by taking an average of a number of years instead of a single year. Taking into account the various criteria for the selection of base period, triennium ending 1969-70, has been selected as the base period of the all-India revised series. This is in accordance with the recommendations of the Central Advisory Committee on Statistics and also the FAO.

Coverage: During recent years, a number of additional crops have been covered under the system of crop estimation. To make the all-India series more representative its coverage has been enlarged. The revised series covers 42 crops divided into two main groups and eight sub-groups[1], accounting for nearly 96 per cent of the total gross cropped area in the country.

Weights

Area under Crops: As area under crops can be added hectare by hectare, no explicit weights have been given to different crops for computation of sub-group, group and all crop indices. These have been calculated directly from the area under sub-groups, groups and all crops in different years. There is thus implied weighting in proportion to the area under individual crops to the total area under all crops in the base period.

Cropping Pattern: Weights are assigned to individual crops in proportion to the value of yield per hectare during the base period.

Yield: Current year's area under individual crops is used as weight to the value of yield per hectare using base period prices.

Agricultural Production: Average prices in the base period have been used as weight coefficients.

The prices used for the weighting diagrams of various indices are harvest prices or wholesale prices during the peak marketing period in the primary markets.

Concept of Production: The concept of production utilised in the index of agricultural production is essentially that of gross production of crops, no allowance being made for wastage or seed.[2]

Methodology: The change-over during the last decade or so from the traditional method of reporting area and production of crops to the method of complete enumeration in the case of area and to crop estimation, survey for estimation of yield rates, and also the increase in reporting area, have taken place progressively in respect of different crops in different states. To provide for the changes in coverage and methods of estimation, the index numbers of area under crops, yield, agricultural production, etc., are constructed by the chain-base method under which the area, production, yield, etc., of a crop during a year are expressed as a relative of the corresponding area, production, yield in the preceding year, based on the same coverage and method of estimation. These relatives for each crop are linked to the base year through the intervening chain relatives to give the area, production, yield, etc., indices for the crop.[3]

In order to maintain continuity in the index numbers of area under crops, agricultural production and yield, the new series has been linked with the old series by suitable conversion factors for the base period in respect of individual crops.[4]

References

1. The crops include are:

Foodgrains

(i) *Cereals*—Rice, jowar, bajra, maize, ragi, wheat, barley and small millets.

(ii) *Pulses*—Gram, tur and other pulses.

Non-Foodgrains

(i) *Oilseeds*—Groundnut, sesamum, rapeseed and mustard, linseed, castorseed, cottonseed, safflower, nigerseed and coconut.

(ii) *Fibres*—Cotton, jute, mesta and sannhemp.

(iii) *Plantation Crops*—Tea, coffee and rubber.

(iv) *Condiments and Spices*—Pepper, ginger, chillies, turmeric, arecanut, coriander and cardamom.

(v) *Fruits and Vegetables*—Potatoes, bananas, cashewnut, tapioca and sweet potato.

(vi) *Miscellaneous Crops*—Sugarcane, tobacco and guarseed.

2. It may be mentioned that the F.A.O. series of index numbers of agricultural production is also essentially based on gross output but that organisation deducts quantities of crops, milk and skimmed milk utilised as animal feed whether they come from domestic or import sources. This is done to avoid double counting which would occur if foodgrains credited to the food crop production are fed to livestock and the resultant livestock products are included in the index. *This situation does not arise in the case of India since livestock products are excluded from the scope of our index of agricultural production.*

3. The application of chain-base method involves two basic assumptions which are:

(i) the variation in production/area/yield in the non-reporting areas is the same as that in the reporting areas in the aggregate; and

(ii) the relative variation in the figures of yield/production based on crop-estimation surveys is the same as that based on the traditional method of crop estimation employing eye-appraisal and normal yield figures.

The practical implications of (ii) above are that, for the transitional year, that is, when the method of estimation undergoes a change, the estimates of production/yield should be available on the basis of both the traditional method and the crop estimation surveys.

4. The procedures for working out the sub-group, group and all-crop indices of area, production and yield are indicated below :

Area under Crops—As no explicit weights are assigned to individual crops, the sub-group, group and all-crop indices have been reworked with triennium ending 1969-70 as based on the basis of area under the sub-group, group and all-crops, keeping the coverage as in the old series for the period prior to 1967-68.

Agricultural Production—Individual crop indices in the revised base have been combined into sub-group, group and all-crop indices, taking the revised weights for the triennium ending 1969-70 and keeping the coverage as in the old series for the period prior to 1967-68.

Yield—Yield index for a particular crop in a particular year has been worked out dividing the index of production by the index of area multiplied by 100. The composite sub-group/group/all-crop indices of yield have been worked out as per methodology given above.

NOTICE

It is hereby notified for the information of the public that Reliance Textile Industries Limited propose to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval for the establishment of a new Undertaking (vertical integration in the existing activity) for the production, supply, distribution or control of manufacturing polyester filament yarn with installed capacity of 10,000 tonnes and production estimated of 10,000 tonnes. Other particulars of the proposed New Undertaking are as under:—

(i) Name of the proposed Undertaking: Reliance Textile Industries Limited (Filament Yarn Division).

(ii) Name(s) of person(s) or authority/authorities proposing to establish the New Undertaking; where it is a body corporate, furnish details of its Management Structure together with those of the proposed undertaking: Reliance Textile Industries Limited—The Company is managed by Board of Directors consisting of:—

1. Shri D.H.Ambani—Chairman and Managing Director.
2. Shri R.H. Ambani—Joint Managing Director
3. Shri K. Gopal Rao
4. Shri J.R. Shah
5. Shri M.L. Bhakta
6. Shri K. S. Shenoy—Nominee Director
7. Shri A.J. Advani -do-
8. Shri N.H.Ambani } Executive Directors
9. Shri R.C. Patel } Executive Directors
10. Shri R.L. Meswani
11. Shri T. Ramesh U. Pai
12. Shri M.D. Ambani

(iii) Capital structure of the applicant person or authority and of the proposed undertaking: The present Capital Structure of the Company is as under:

	Authorised	Issued & Subscribed
	Rs.	Rs.
Equity Shares	18,00,00,000	5,95,11,000
Preference Shares	1,00,00,000	30,00,000
Unclassified Shares	1,00,00,000	—
	20,00,00,000	6,25,11,000

(iv) Proposed location of the New Undertaking: Naroda, Ahmedabad (Gujarat State) as may be approved by the Government.

(v) Brief outline of the cost of the project, the Scheme and Source of Finance: Estimated Project Cost is Rs. 5,100 lakhs which is proposed to be financed by the Company's own resources and borrowings from the term lending institutions, Banks, by issuing debenture bonds, etc.

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhavan, New Delhi, within 14 days from the date of publication of this Notice intimating his views on the Proposal and indicating the nature of his interest therein.

for RELIANCE TEXTILE INDUSTRIES LIMITED

Vinod M. Ambani
Secretary

Court House,
Tilak Marg,
Bombay 400 002
Dated the 1st September 1979.

All-India Index Numbers of Net Area Sown, Area under Crops, Cropping Intensity, Cropping Pattern, Crop Yields, Productivity per Hectare of Net Area and Agricultural Production : 1949-50 to 1977-78

(Base : Triennium ending 1969-70 = 100)

Year	Index of Net Area Sown	Index of Area under Crops	Index of Cropping Intensity	Index of Cropping Pattern	Index of Productivity per Hectare of Net Area	Index of Yield	Index of Agricultural Production
Pre-Plan							
1949-50	86.1	78.3	94.8	96.6	75.3	82.2	62.2
1950-51	86.8	78.2	93.7	98.4	70.1	76.0	58.5
First Plan							
1951-52	87.3	79.7	94.7	97.3	70.6	76.6	59.4
1952-53	88.9	82.5	94.3	95.1	71.9	80.2	62.9
1953-54	91.3	87.1	95.9	92.8	78.8	88.6	71.6
1954-55	92.1	87.9	96.1	94.1	78.9	87.3	72.2
1955-56	93.1	90.0	96.7	95.2	77.2	83.9	71.9
Second Plan							
1956-57	94.2	90.8	97.2	97.0	81.6	86.5	76.2
1957-58	93.2	89.9	95.7	96.4	75.4	81.7	70.8
1958-59	95.1	93.5	97.6	96.0	85.8	91.6	82.2
1959-60	95.9	94.8	98.9	96.0	83.6	88.0	80.1
1960-61	96.1	94.5	98.3	96.9	90.2	94.7	86.7
Third Plan							
1961-62	97.7	96.6	98.9	97.2	88.8	92.4	86.8
1962-63	98.3	97.4	99.1	96.8	86.8	90.5	85.3
1963-64	98.4	97.2	98.8	97.3	88.6	92.2	87.2
1964-65	99.5	98.4	98.9	98.8	97.4	99.7	96.9
1965-66	98.2	96.1	97.9	99.1	82.3	84.8	80.8
Annual Plans							
1966-67	99.0	96.0	97.0	97.6	80.7	86.1	80.7
1967-68	100.8	100.1	99.3	98.3	98.1	100.5	98.9
1968-69	99.2	98.5	99.3	100.5	98.1	98.3	97.3
Fourth Plan							
1969-70	100.0	101.4	101.4	101.2	103.8	101.2	103.8
1970-71	101.6	102.5	100.9	101.0	109.8	107.7	111.5
1971-72	101.2	101.9	100.7	101.9	109.9	107.1	111.2
1972-73	99.3	98.7	99.4	103.0	103.0	100.6	102.3
1973-74	103.0	104.5	101.5	101.3	109.2	106.2	112.4
Fifth Plan							
1974-75	99.6	100.8	101.2	103.5	109.2	104.3	108.8
1975-76	102.6	105.9	103.2	103.2	122.2	114.7	125.3
1976-77	N.A.	103.2	N.A.	104.1	N.A.	108.4	116.5
1977-78	N.A.	106.2	N.A.	105.3	N.A.	118.7	132.7

N.A. = Not available.

Source : Directorate of Economics and Statistics, Ministry of Agriculture and Irrigation, Government of India, New Delhi.

Long-Term Growth Trends in Indian Agricultural Production : 1949-50 to 1977-78

(Since the Commencement of the Planning Era)

(Index Numbers with Base : Triennium ending 1969-70 = 100)

Period/Plan	Year	Foodgrains			Non-Foodgrains							
		Cereals	Pulses	Total : 1+2	Oilseeds	Fibres	Plantation Crops	Condiments & Spices	Fruits & Vegetables	Misc. Crops	Total : 4 to 9	All Crops (Total : 3+10)
		1	2	3	4	5	6	7	8	9	10	11
	Weight	60.05	8.07	68.12	10.96	4.03	2.28	2.31	3.97	8.33	31.88	100.00
Pre-Plan	1949-50	59.9	89.1	63.4	67.2	53.0	60.2	71.9	39 8	54.4	58.8	62.2
	1950-51	53.8	81.6	57.1	66.1	57.8	62.7	83.3	42.7	60.1	62.0	58.5
First Plan	1951-52	54.6	81.1	57.7	65.0	67.2	65.9	83.4	44.1	62.1	64.2	59.4
	1952-53	60.6	87.1	63.7	61.3	67.4	69.8	70.4	51.3	54.1	60.6	62.9
	1953-54	72.0	98.4	75.1	69.2	72.2	62.9	75.3	50.3	49.9	62.0	71.6
	1954-55	68.4	102.7	72.5	81.9	76.7	68.4	92.8	45.4	60.9	71.4	72 2
	1955-56	68.5	103.4	72.6	72.9	79.5	68.6	88.2	47.9	64.5	70.1	71.9
Second Plan	1956-57	71.7	107.0	75.9	80.6	91.1	74.5	86.6	44.4	72.1	77.2	76.2
	1957-58	66.1	89.1	68.8	79.8	88.3	74.4	87.0	50.2	70.0	76.1	70.8
	1958-59	77.5	116.1	82.1	91.8	92 6	77.2	81.4	58.8	74.5	82.5	82.2
	1959-60	77.2	104.6	80.4	82.6	72.4	79.6	83.5	75.4	79.4	79.6	80.1
	1960 61	82.6	112.3	86.1	89.8	96.3	78.3	91.0	67.9	93.3	88.1	86.7
Third Plan	1961-62	84.6	103.0	86.8	89.6	97.6	84.9	86.6	63.3	90.1	86.9	86.8
	1962-63	81.4	101.8	83.8	94.8	102.8	84.1	95.8	71.0	81.3	88.6	85.3
	1963-64	84.8	89.0	85.3	91.3	109.1	85.2	103.8	70.6	90.8	91.3	87.2
	1964-65	92.3	109.5	94.3	107.2	111·9	91.9	105.3	82.6	103.5	102.5	96.9
	1965-66	74.2	88.0	75.8	85.6	88.5	91.7	92.3	87.8	101.6	91.3	80.8
Annual Plans	1966-67	77.5	73.7	77.1	86.8	97.3	96.5	98.0	88.0	81.9	88.5	80.7
	1967-68	97.7	106.7	98.7	105.4	108.5	96.1	107.0	98.1	85.0	99.0	98.9
	1968-69	98.2	90.2	97.3	92.4	89.1	103.0	94.9	104.0	104.2	97.4	97.3
Fourth Plan	1969.70	104.1	103.1	104.0	102.2	102.4	100.9	98.1	97.9	110.8	103.6	103.8
	1970-71	114.1	104.4	112.9	116.1	89.3	114.8	116.4	103.2	106.9	108.7	111.5
	1971-72	113.2	97.9	111.4	114.3	120.9	112.7	115.6	111.8	99.2	110.9	111.2
	1972-73	104.3	87.6	102.3	95.3	101.5	121.8	99.5	106.2	104.9	102.2	102.3
	1973-74	113.2	88.5	110.3	114.5	115.4	125.8	115.4	112.2	121.4	117.0	112.4
Fifth Plan	1974-75	106.4	88.8.	104.3	114.9	119.4	130.9	112.5	125.1	117.2	118.3	108.8
	1975-76	128.8	115.3	127 2	123.8	103.4	129.9	121.2	136.6	116.9	121.3	125.3
	1976-77	117.8	100.3	115.7	104.1	106.3	139.3	106.9	135.7	131.4	118.2	116.5
	1977-78	136.6	104.2	132.8	116.5	123.3	152.2	115.6	144.6	151.8	132.6	132.7

Source : Directorate of Economics and Statistics, Ministry of Agriculture and Irrigation, Government of India, New Delhi.

All-India-Index Numbers of Agricultural Production : 1949-50 to 1977-78

A : Foodgrains

(Base : Triennium ending 1969-70=100)

Period/Plan	Year	Cereals						Pulses				Total Food-grains (6+10)
		Rice	Wheat	Jowar	Maize	Bajra	All Cereals including others*	Gram	Tur	Other Pulses	Total : 7 to 9	
		1	2	3	4	5	6	7	8	9	10	11
	Weight	33.98	12.16	4.86	3.06	2.83	60.05	3.58	1.35	3.14	8.07	68.12
Pre-Plan	1949-50	64.1	37.4	70.6	48.2	67.0	59.9	74.7	110.9	96.2	89.1	63.4
	1950-51	56.3	37.8	63.4	40.7	56.2	53.8	73.3	101.9	82.3	81.6	57.1
First Plan	1951-52	57.7	35.2	68.0	48.9	50.9	54.6	65.9	108.4	86.7	81.1	57.7
	1952-53	62.0	42.2	75.3	59.4	63.5	60.6	81.6	100.8	87.4	87.1	63.7
	1953-54	76.0	44.9	82.6	62.8	90.5	72.0	93.7	110.3	98.7	98.4	75.1
	1954-55	67.8	50.7	93.4	61.5	72.3	68.4	109.0	101.9	95.8	102.7	72.5
	1955-56	73 2	49.2	68.3	54.2	72.6	68.5	103.8	110.2	99.9	103.4	72.6
Second Plan	1956-57	77.1	52.7	74.4	64.0	60.4	71.7	119 4	117.8	88.3	107.0	75.9
	1957-58	67.8	44.3	87.6	65.6	76.1	66.1	94.0	85.7	84.9	89.1	68.8
	1958-59	81.7	55.1	91.7	65.3	81.3	77.5	134.8	98.9	102.2	116.1	82.1
	1959-60	81.2	57.2	87.1	71.0	74.2	77.2	107.9	96.6	104.3	104.6	80.4
	1960-61	88.3	60.9	100.4	71.1	68.9	82.6	119.9	117.8	101.2	112.3	86.1
Third Plan	1961-62	90.8	66.9	80.7	73.8	75.8	84.6	110.8	77.7	105.0	103.0	86.8
	1962-63	85.2	59.7	98.9	79.8	83.0	81.4	102.7	89.0	106.2	101.8	83.8
	1963-64	94.5	54.6	93.4	79.0	81.3	84.8	86.2	77.6	97.1	89.0	85.3
	1964-65	100.4	67.9	98.3	80.6	94.7	92.3	110.6	106.2	109.7	109.5	94.3
	1965-66	78.1	57.6	76.9	83.3	78.6	74.2	80.9	97.4	92.1	88.0	75.8
Annual Plans	1966-67	77.8	63.2	93.5	84.6	93.7	77.5	69.4	63.5	83.1	73.7	77.1
	1967-68	96.1	91.7	102.0	108.3	108.7	97.7	114.5	97.9	101.4	106.7	98.7
	1968-69	101.1	96.9	99.4	96.1	79.7	98.2	79.2	98.6	99.2	90.2	97.3
Fourth Plan	1969-70	102.8	111.4	98.6	95.6	111.6	104.1	106.3	103.5	99.4	103.1	104.0
	1970-71	107.4	132.1	82.3	126.1	168.2	114.1	99.7	105.8	109.3	104.4	112.9
	1971-72	110.2	146.4	78.3	85.9	111.5	113.2	97.4	94.5	100.0	97.9	111.4
	1972-73	100.4	137.1	70.6	107.5	82.4	104.3	87.0	108.3	79.5	87.6	102.3
	1973-74	112.7	120.7	92.2	97.6	157.6	113.2	78.7	79.1	103.8	88.5	110.3
Fifth Plan	1974-75	101.3	133.6	105.5	93.2	68.6	106.4	77.1	103.0	96.1	88.8	104.3
	1975-76	124.7	159.9	96.3	118.8	120.2	128.8	112.9	117.9	116.8	115.3	127,2
	1976-77	107.2	160.8	106.6	104.0	122.6	117.8	104.2	96.9	97.2	100.3	115.7
	1977-78	134.7	173.6	119.7	97.2	98.7	136.6	104.7	106.0	102.9	104.2	132.8

* Including Ragi, Small Millets and Barley with weights 1.01, 0.81 and 1.34 respectively.

Source : Directorate of Economics and Statistics, Ministry of Agriculture and Irrigation, Government of India, New Delhi.

All-India Index Numbers of Agricultural
B: Non-

Period/Plan	Year		Oilseeds				Fibres				Plantation	
		Ground-nut	Rapeseed and Mustard	Coconut	Cotton-seed	All Oil-seeds including others*	Cotton (Lint)	Jute	Mesta	All Fibres including Sannhemp@	Tea	Coffee
		1	2	3	4	5	6	7	8	9	10	11
	Weight	4.82	1.73	1.87	1.19	10.96	3.01	0.81	0.15	4.03	1.85	0.24
Pre-Plan	1949-50	63.4	54.4			67.2	49.1	66.2	59.7	53.0	67.5	34.9
	1950-51	64.3	51.4			66.1	54.3	70.4	59.7	57.8	70.1	39.2
First Plan	1951-52	59.0	63.1			65.0	58.5	100.2	62.7	67.2	74.0	39.3
	1952-53	54.1	57.4			61.3	59.4	98.4	61.7	67.4	77.9	44.0
	1953-54	63.6	58.4			69.2	74.5	66.2	58.8	72.2	67.9	51.2
	1954-55	78.4	69.4			81.9	80.2	62.8	81.5	76.7	74.5	53.0
	1955-56	71.3	57.5			72.9	75.5	89.9	104.4	79.5	72.4	68.5
Second Plan	1956-57	80.7	69.8			80.6	88.9	91.6	132.3	91.1	79.1	71.2
	1957-58	87.1	62.4			79.8	87.7	85.2	117.2	88.3	78.1	80.2
	1958-59	94.5	69.8			91.8	86.2	105.0	152.8	92.6	80.6	84.1
	1959-60	86.2	71.0	86.5	63.6	82.6	65.0	90.5	104.5	72.4	82.8	90.6
	1960-61	91.0	90.2	84.7	97.1	89.8	99.2	83.2	100.9	96.3	81.6	86.1
Third Plan	1961-62	91.8	90.0	81.9	83.9	89.6	85.7	126.9	166.1	97.6	90.1	80.5
	1962-63	95.7	87.3	90.8	96.0	94.8	98.0	109.5	157.9	102.8	88.1	83.0
	1963-64	100.1	61.2	86.7	100.2	91.3	102.4	122.3	171.9	109.1	88.0	89.2
	1964-65	116.3	98.7	90.5	105.2	107.2	107.4	122.0	144.9	111.9	94.6	93.9
	1965-66	82.6	86.9	90.4	84.9	85.6	86.7	90.1	118.0	88.5	93.1	98.5
Annual Plans	1966-67	85.4	82.2	93.2	94.8	86.8	94.1	107.8	110.7	97.3	95.5	121.0
	1967-68	111.0	105.0	95.4	103.5	105.4	103.2	127.2	115.5	108.5	97.7	88.5
	1968-69	89.7	90.2	99.5	97.1	92.4	97.4	59.0	82.1	89.1	102.3	113.4
Fourth Plan	1969-70	99.3	104.8	105.1	99.4	102.2	99.4	113.8	102.4	102.4	100.0	98.1
	1970-71	118.4	132.3	108.9	85.3	116.1	85.1	99.6	113.7	89.3	106.4	170.1
	1971-72	119.7	96.0	109.8	124.3	114.3	124.2	114.7	104.3	120.9	110.7	106.4
	1972-73	79.3	121.1	107.5	102.6	95.3	102.4	100.4	100.8	101.5	115.9	140.7
	1973-74	114.9	114.2	104.9	112.9	114.5	112.7	125.4	132.0	115.4	120.0	133.4
Fifth Plan	1974-75	99.1	150.8	108.1	128.3	114.9	127.8	90.2	123.5	119.4	124.4	142.8
	1975-76	130.9	129.6	104.5	106.6	123.8	106.2	89.5	127.0	103.4	123.7	129.6
	1976-77	102.0	103.8	104.6	104.5	104.1	104.2	107.9	150.4	106.3	130.0	157.8
	1977-78	117.6	108.3		127.6	116.5	126.8	107.6	153.3	123.3	142.2	188.7

*Including Sesamum, Linseed, Castorseed, Safflower and Nigerseed with weights 0.62, 0.43, 0.11, 0.09 and 0.10 respectively.

@Which has a weight of 0.06 in the index.

Production: 1949-50 to 1977-78

Foodgrains

(Base: Triennium ending 1969-70=100)

Crops		Condiments and Spices		Vegetables and Fruits					Miscellaneous Crops			
Rubber	Total (10 to 12)	All	*of which*: Black Pepper	Potatoes	Topioca	Bananas	Cashewnuts	Total including Sweet Potato†	Sugarcane (Gur)	Tobacco	Total including Guarseed$	Total Non-Foodgrains (5+9+13+14+20+23)
12	13	14	15	16	17	18	19	20	21	22	23	24
0.19	2.28	2.31	0.08	1.41	0.81	1.11	0.21	3.97	7.01	1.14	8.33	31.88
22.0	60.2	71.9	98.0	39.8				39.8	51.2	74.3	54.4	58.8
20.6	62.7	83.3	95.3	42.7				42.7	58.1	72.3	60.1	62.0
20.8	65.9	83.4	105.4	44.1				44.1	62.8	57.9	62.1	64.2
23.4	69.8	70.4	100.7	51.3				51.3	51.9	67.8	54.1	60.6
29.0	62.9	75.3	111.1	50.3				50.3	45.8	75.4	49.9	62.0
28.1	68.4	92.8	124.8	45.4				45.4	59.3	70.7	60.9	71.4
32.2	68.6	88.2	130.0	47.9				47.9	61.3	83.9	64.5	70.1
33.6	74.5	86.6	129.0	44.4				44.4	70.1	84.5	72.1	77.2
30.8	74.4	87.0	125.6	50.2				50.2	70.6	66.4	70.0	76.1
35.2	77.2	81.4	124.7	58.8				58.8	72.3	87.8	74.5	82.5
34.7	79.6	83.5	123.9	68.6		86.4	63.4	75.4	78.2	80.9	79.4	79.6
36.7	78.3	91.0	132.3	66.9	40.8	87.6	68.6	67.9	94.1	84.5	93.3	88.1
39.6	84.9	86.6	132.2	60.4	39.2	89.4	68.8	63.3	88.7	94.1	90.1	86.9
46.1	84.1	95.8	121.3	78.5	36.4	94.9	75.7	71.0	78.0	95.9	81.3	88.6
52.6	85.2	103.8	111.6	60.5	58.4	99.9	77.4	70.6	88.2	101.2	90.8	91.3
62.9	91.9	105.3	112.5	84.0	62.8	103.1	82.8	82.6	102.9	100.1	103.5	102.5
69.7	91.7	92.3	107.3	95.0	71.8	103.2	85.3	87.8	105.3	82.4	101.6	91.3
75.6	96.5	98.0	106.8	82.1	79.0	107.7	89.8	88.0	78.3	99.4	81.9	88.5
88.9	96.1	107.0	102.2	98.7	96.1	101.1	94.7	98.1	80.7	103.7	85.0	99.0
98.0	103.0	94.9	99.3	110.1	96.0	98.7	99.7	104.0	105.7	101.5	104.2	97.4
113.1	100.9	98.1	98.5	91.2	107.9	100.2	105.6	97.9	113.6	94.8	110.8	103.6
127.1	114.8	116.4	101.3	112.0	106.2	91.5		103.2	106.4	101.8	106.9	108.7
139.6	112.7	115.6	101.3	117.2	124.7	106.6		111.8	95.4	117.8	99.2	110.9
155.1	121.8	99.5	101.3	108.3	131.9	94.7		106.2	104.7	104.6	104.9	102.2
172.7	125.8	115.4	111.0	118.0	133.9	99.8		112.2	118.3	129.9	121.4	117.0
179.5	130.9	112.5	109.0	151.1	130.9	103.2		125.1	120.7	102.0	117.2	118.3
190.2	129.9	121.2	110.6	176.0	133.1	107.5		136.6	118.2	98.4	116.9	121.3
206.5	139.3	106.9	136.5	172.7	127.8	117.9		135.7	130.0	117.8	131.4	118.2
202.9	152.2	115.6	137.4	196.4	130.2			144.6	154.0	125.2	151.8	132.6

†Which has a weight of 0.43 in the index.

$Whose weight in the index is 0.18.

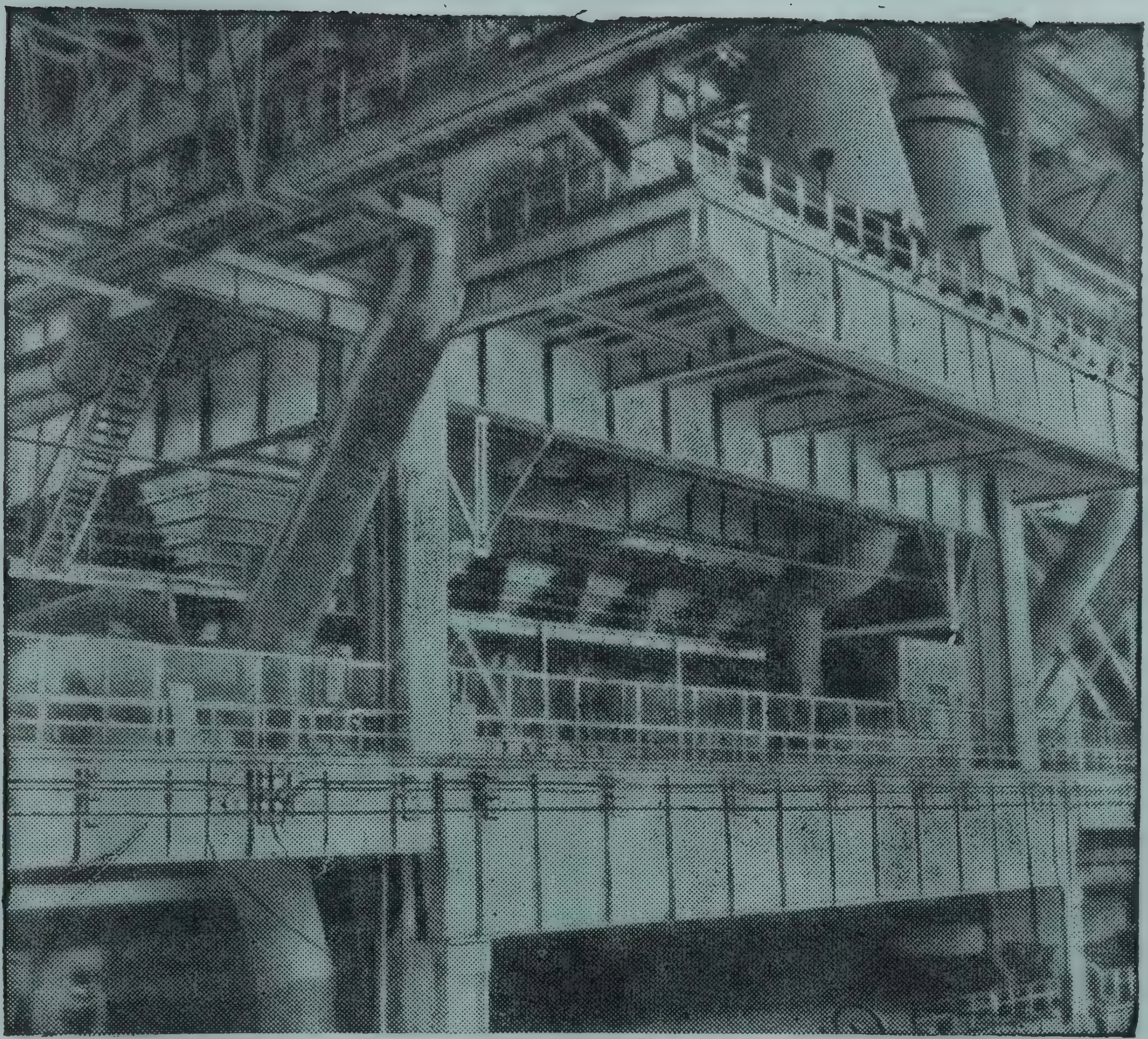
Source : Directorate of Economics and Statistics, Ministry of Agriculture and Irrigation, Government of India, New Delhi.

Compound Growth Rates of Area under Crops, Agricultural Production and Yield : 1949-50 to 1977-78
(All-India)

(Per cent)

Crop/Group of Crops	1949-50 to 1977-78			1952-53 to 1977-78			1960-61 to 1977-78			1967-68 to 1977-78		
	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
Rice	1.02	2.56	1.53	1.01	2.37	1.34	0.72	1.85	1.12	0.74	2.21	1.46
Jowar	(—)0.04	1.23	1.26	(—)0.34	0.89	1.23	(—)1.05	0.30	1.37	(—)1.71	1.53	3.30
Bajra	0.60	2.45	1.83	0.22	2.23	2.00	0.09	2.41	2.30	(—)1.38	0.01	1.38
Maize	2.39	3.11	0.71	2.23	2.73	0.49	1.09	2.24	0.34	0.18	(—)0.05	(—)0.21
Ragi	0.28	1.72	1.43	0.22	1.41	1.18	(—)0.07	1.36	1.44	1.05	3.45	2.39
Wheat	2.81	5.85	2.95	2.76	6.03	3.18	3.35	7.52	4.03	3.10	5.73	2.53
Barley	(—)1.20	(—)0.09	1.11	(—)1.48	(—)0.36	1.12	(—)1.63	(—)0.05	1.58	(—)2.70	(—)1.40	1.27
Cereals	**0.97**	**2.95**	**1.69**	**0.84**	**2.82**	**1.61**	**0.71**	**2.79**	**1.69**	**0.34**	**2.67**	**1.77**
Gram	(—)0.31	0.41	0.71	(—)0.77	(—)0.38	0.38	(—)1.47	(—)1.03	0.43	0.42	0.09	(—)0.38
Pulses	**0.46**	**0.30**	**0.04**	**0.10**	**(—)0.07**	**(—)0.00**	**(—)0.43**	**(—)0.45**	**0.13**	**0.75**	**0.20**	**(—)0.42**
FOODGRAINS	0.86	2.60	1.53	0.68	2.44	1.51	0.47	2.40	1.51	0.38	2.40	1.53
Groundnut	1.91	2.32	0.40	1.57	2.08	0.50	0.06	0.80	0.74	(—)0.36	1.13	1.47
Sesamum	0.06	0.13	0.08	(—)0.08	0.06	0.15	(—)0.39	0.79	1.20	(—)1.19	(—)0.03	1.21
Rapeseed and Mustard	1.91	3.21	1.28	1.77	3.23	1.43	1.04	2.67	1.61	1.00	1.64	0.63
Oilseeds	**1.34**	**2.20**	**0.47**	**1.13**	**2.08**	**0.56**	**0.10**	**1.42**	**0.86**	**0.04**	**1.40**	**1.16**
Cotton	0.64	2.58	1.93	0.07	2.01	1.94	(—)0.64	1.04	1.69	(—)0.64	2.03	2.69
Jute	0.76	1.22	0.41	0.48	1.01	0.47	(—)1.03	(—)0.59	0.37	(—)0.23	0.68	0.67
Fibres	**0.63**	**2.24**	**1.52**	**0.09**	**1.74**	**1.53**	**(—)0.71**	**0.58**	**1.33**	**(—)0.57**	**1.75**	**2.27**
Tea	0.80	2.44	1.62	0.87	2.57	1.69	0.87	2.91	2.02	0.58	3.58	2.98
Coffee	2.64	5.11	2.41	2.84	4.51	1.62	2.86	4.35	1.44	4.35	5.43	1.03
Sugarcane	2.29	3.50	1.17	2.32	3.62	1.27	1.40	2.55	1.12	3.07	4.31	1.18
Tobacco	0.89	2.09	1.19	0.65	2.03	1.37	0.15	1.41	1.27	(—)0.54	1.60	2.17
NON-FOODGRAINS	1.42	2.74	0.90	1.19	2.68	0.94	0.62	2.12	0.87	1.01	2.70	1.15
ALL CROPS	0.98	2.64	1.31	0.79	2.51	1.27	0.51	2.31	1.29	0.55	2.50	1.40

Source : Directorate of Economics and Statistics, Ministry of Agriculture and Irrigation, Government of India, New Delhi.



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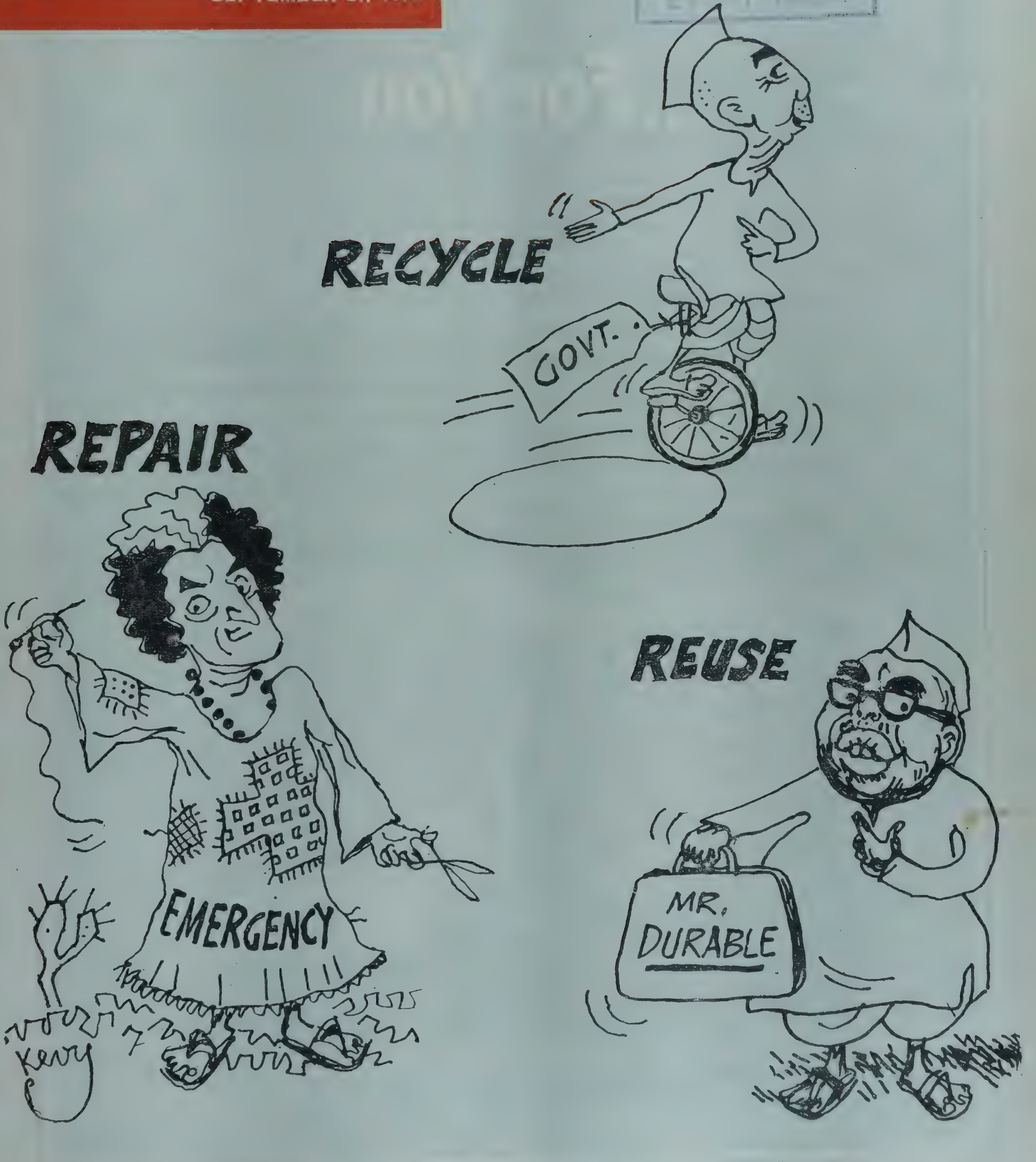
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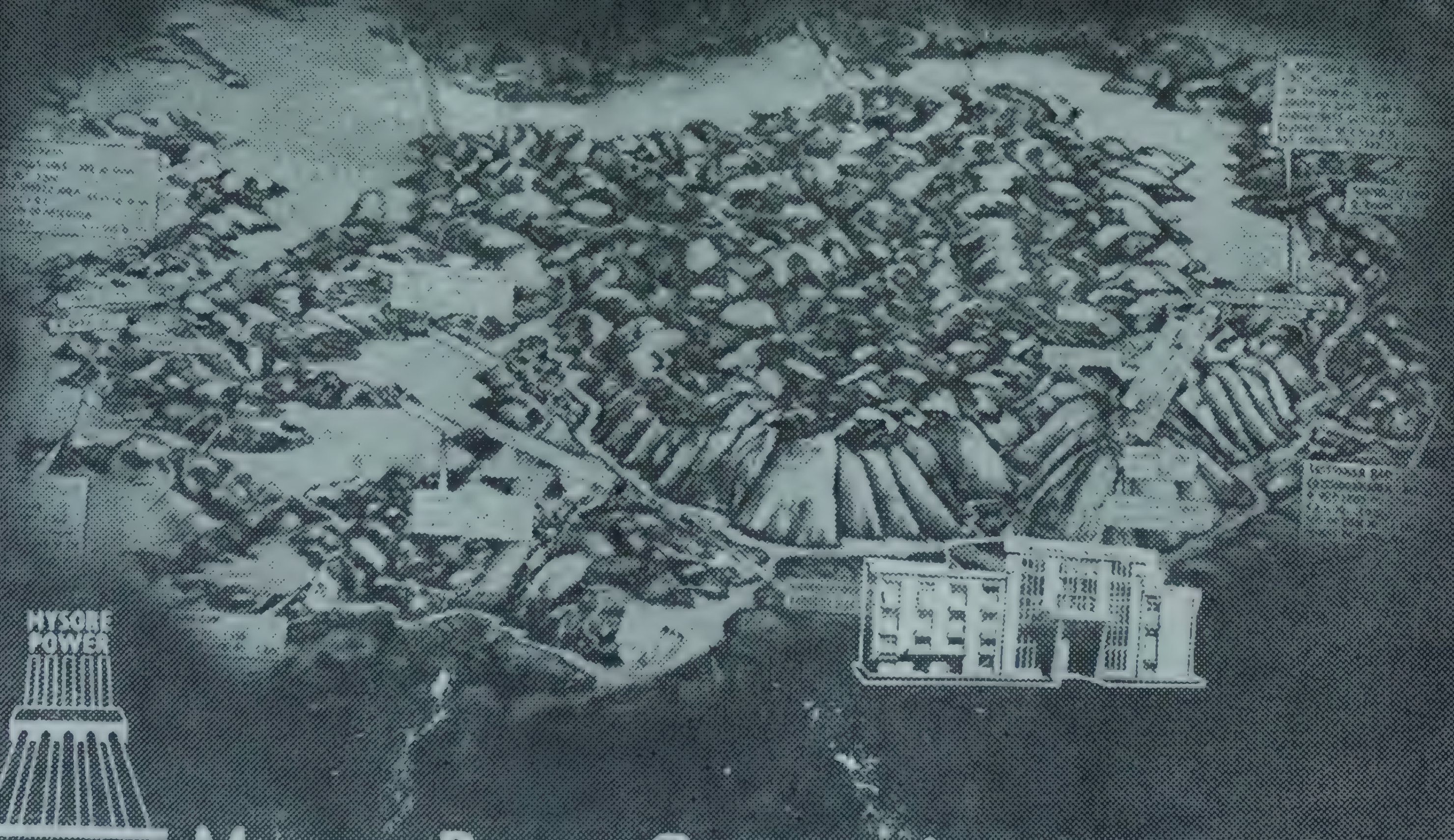

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CHAITRA-MPC-379

5 OCT 1979

Plan goes awry

IT IS, indeed, ironical that the various expectations of the Planning Commission about the growth of the economy during the current financial year have gone awry even before the 1979-80 (annual) Plan could be released last week (see Plan highlights in the Records and Statistics section). This Plan was drawn up on the basis of the last year's performance and the appreciation of the various constraints on the economy at the time of its preparation for publication by the end of May. The publication had been delayed for one reason or the other by over three months. In the meanwhile, events took a serious turn upsetting all calculations. A short note on the situation that has developed since May last and its impact on the 1979-80 Plan would have been a worthwhile exercise on the part of the Planning Commission so that a more realistic picture of the year's expected progress could have been available.

The Planning Commission, of course, has done well in focusing attention on five serious problems that have afflicted the economy during the recent months. These are: (i) the growing inflationary potential within the economy; (ii) increasing non-Plan, non-developmental expenditure which can erode the availability of public savings for investment, (iii) a structural weakness in the balance of payments position, necessitating the surplus of invisibles being relied upon to reduce trade deficit caused, among other factors, by a falling rate of growth of merchandise exports; (iv) the fall in the profitability of the public sector on account of poor performance on the power and transport fronts; and (v) the emerging shortages of fuel and construction materials.

Fuel shortages, stringent supplies of construction materials, the non-too-happy situation in regard to the availability of power and transport undoubtedly have played havoc with the economy during the past four months. The adviser to the ministry of Industry, Mr Hari Bhushan disclosed few days ago that following the shortage of such essential industrial raw materials as steel, coal, pig iron, cement and furnace oil, the economy had lost as much as Rs 10,000 crores this year. Besides, the widespread drought in most parts of the country, which has been relieved to some extent by the recent rains in northern India, has added a new dimension to the difficulties being encountered by damaging crops worth Rs 3,500 crores. The communication services too leave much to be desired. It, therefore, will not be surprising in the least that the economy will receive a serious setback this year.

Even otherwise, the forecast of the Planning Commission that the Gross Domestic Product would grow this year by just 4.04 per cent as compared to 4.46 per cent last year and 7.25 per cent in 1977-78, implies a deceleration of growth. This forecast, the Planning Commission, however, has opined, would be consistent with the target growth rate of 4.7 per cent per annum for the sixth Plan period.

As things stand today, there is every possibility of the agricultural production showing a negative growth this year, instead of even a marginal improvement over the last year's performance. The industrial output is being affected by serious shortages of coal and power and industrial unrest and transport bottlenecks. The seven to eight per cent growth envisaged in this year's Plan document, therefore, cannot be expected to be attained. The price level has already gone up by nearly 20 per cent and the inflationary potential has not yet exhausted itself. The setback to agricultural and industrial production as well as the serious inflationary tendencies are bound to have a grievous impact on exports, although they did fairly well during the first quarter to June-end. The import bill, which has been bloated considerably by the recent hike in the crude oil price, will expand further if the supplies of such essential items such as steel, fertilisers, cement, edible oils, etc,, are to be even nearly matched to the requirements. Disconcertedly, the inward remittances by Indians abroad, the Plan document suggests, would not rise further. It, thus, remains to be seen whether the country's foreign exchange reserves would show this year even a modest rise of Rs 100/150 crores estimated in the Plan document.

A special feature of this year's short-term Plan, of course, is the linkage of savings and investments with production targets for the first time. But this linkage can be expected to be upset as production targets are not likely to be attained even with the best of efforts now. This introduces a new uncertainty in regard to the price trends, as the capital-output ratio on the basis of which the Plan has been drawn up is quite high. Investment is being maintained at a respectable ratio of 23.4 per cent of the GNP.

inflated ratio

It is true that with greater attempts being made to develop infrastructure, the capital-output ratio gets inflated. But in the overall interests of the economy, it needs to be stressed that the impact of a high capital-output ratio in the short-term cannot be completely ignored even from the long-term point of view. If there is no reasonable stability of prices in the short-term, the long-term prospects will be impaired indisputably, specially when sectional interests, particularly of the organised work-force, the trading community and similar other sectors are weighing with them far more than the national interest. These sections are more concerned with safeguarding their real incomes irrespective of the adverse effect which this endeavour on their part has on the vast majority of the less affluent, an overwhelming proportion of which is below the poverty-line.

It is high time that a national consensus is arrived at for rationalising the apportionment, among the various sections of society, of the gains resulting from the growth of the economy which is the collective endeavour of the entire nation. It is rather unfortunate that the organised work-force is increasingly taking resort to agitational approach the result of which invariably is to throw the economy into a vicious circle of mounting costs, declining output and erosion of profitability, which ultimately is bound to affect the employment situation.

An unworkable remedy

THE RESERVE Bank is at its wit's end and desperate unworkable remedies are being applied to tackle a situation in which credit expansion is inevitable. Because of the serious difference of opinion over the efficacy of higher interest rates and the known opposition to dearer money by the former prime minister, a hike in the Bank Rate and an upward revision of the interest rates was avioded. But the protagonists of dear money and the opponents of big borrowers have had their way after the Charan ministry came into power.

The latest move of the Reserve Bank in raising the lending rates of scheduled commercial banks selectively and steeply along with upward adjustments in deposit rates is thoroughly misconceived. The aim appears to be to penalise only borrowers having limits in excess of Rs 50 lakhs. The deposit rates have been raised by half to one per cent according to the nature of accounts and periods of maturity. But unlike on the last occasion, when the Bank Rate was raised, unmaturing fixed deposits will not have the benefits of the revised interest rates.

The policy now adopted is, thus, not merely a reversal of the procedure followed in March last year. Then, the levy by the central government on interest income derived by banks on some categories of advances was abolished, costing the exchequer Rs 120 crores in a full year, and denying it also a source of expanding revenue. Following the abolition of this levy, the ceiling on lending rates was lowered to 15 per cent from 16.5 per cent and it was also decided that there should not be any penal levy of interest. The rates for lending to Food Corporation in India and other agencies and the borrowers in the priority sector were also lowered apart from the fixation of maximum rate for term loans on a lower basis. The Bank Rate, of course, remained unchanged at nine per cent.

It cannot be said that there has been a reversion to the old structure of interest rates, as the latest revision will affect only 40 per cent of borrowers. The interest rates applicable to specified categories of borrowers in the priority sectors, pre-shipment and post-shipment credits, assistance to sick units, credit to the Food Corporation of India and to state governments and their agencies for public procurement and distribution of foodgrains and credit to specified public sector agencies for procurement/distribution of other commodities, will remain unchanged.

offsetting effect

The loss of 'income' of banks on the former occasion related mainly to the loss in revenue on account of the abolition of the levy by the government. And, there was an offsetting effect of reduction in income due to a lowering of interest rates by more than the earlier incidence of the levy by a lowering of deposit rates. It was of course, complained that the profitability of banks had been eroded particularly as the Reserve Bank curtailed the use of bank funds with the maintenance of the cash reserve and liquidity ratios at high levels even while impounding portions of new deposits.

No policy decision can be said to be involved in the new move of the Reserve Bank as there is a contradiction in thinking. Somehow it is mainly believed that more than 40 per cent of aggregate bank credit, excluding food advances, is the cause of all mischief. The building up of inventories, cornering of stocks of items in short supply and an unmeritted growth in money supply are stated to be arising from undisciplined expansion of credit for use by big borrowers. It has, therefore, been decided to penalise this section through a hike in the lending rate by two per cent in respect of borrowing limits between Rs 50 lakhs and Rs 2 crores and by three per cent for limits exceeding Rs 2 crores.

It has actually been explained by

Dr K.S. Krishnanswamy, deputy governor, Reserve Bank, that the additional bill will be nearly Rs 200 crores in a full year and public sector undertakings too will be subject to the same levy. What can exactly be the excess elements in credit of Rs 8,717 crores extended to these borrowers ? What will be the misapplication of funds for building up inventories and cornering of stocks ? When it is known that the State Trading Corporation, the Indian oil Corporation, the Minerals and Metals Trading Corporation and other agencies have been obliged to hold large stocks of imported items, raw cotton and other materials, is it expected that there will be disgorging of stocks only under the pressure of penal interest rates?

idle exercise

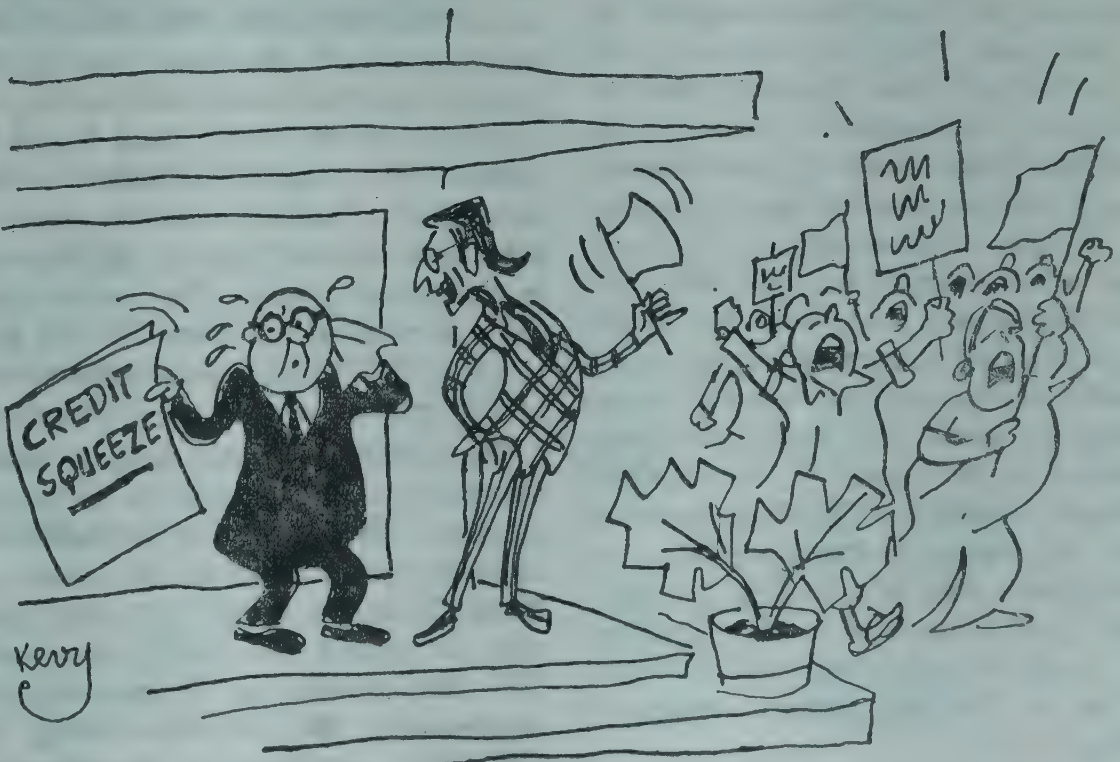
As for the private sector, there has been no build-up of inventories by the cotton textile and sugar industries, while there is a brisk offtake of heavy chemicals. The petrochemical units have been hit by higher costs, while the tyre companies may have effected anticipatory purchases of some items whose prices were consistently rising. The engineering industries too may have been keen on building up stocks of raw materials, but these are not available fully. It will, therefore, be idle to imagine that the necessary corrective can be achieved through the mechanism of interest rate. At best there may be excessive credit for Rs 500 crores and this quantum cannot said to be the cause of all trouble when banks have been exhorted to lend liberally to small borrowers in the priority sectors. The heady expansion of credit to this group has generated additional demand for goods and services apart from creating problems for banks in regard to the recovery of advances.

The penalty of Rs 200 crores through the levy of higher interest rates is bound to be counter-productive. There will surely be a cost-push effect which will result in adjustments in selling prices if capital formation in the industrial sector is not to be affected. The profitability of the working of industries affected by controls over prices and movement will contract seriously, while surplus of public sector undertakings, which is not flattering in any sense, will diminish significantly. All the time, the pace of credit expansion will be accelerated as the small borrowers may be securing more especially with the general election in the offing.

What then is the objective of the Reserve Bank ? Can it be seriously contended that the incremental advances will not be more than 40 per cent of incremental deposits in 1979-80 ? In 1978-79, the ratio was 54 per cent and it is quite probable that a larger proportion of incremental deposits will be utilised in 1979-80. The pitch has already been queered by the unexpected growth in non-food credit by Rs 1,469 crores between March 30, 1979 and August 31, 1979, against only Rs 134 crores in the corresponding period in 1978-79. The incremental advances worked out to 63.1 per cent of incremental deposits, against only 8.68 per cent previously. Who is the offender ? Has there been a big increase in advances to the borrowers in the priority sector and are large sums tied up in imported stocks held by the state agencies ? No rational explantation has been forthcoming so far about the unusual trends in credit.

Instead of carrying out a close scrutiny, an easy way out has been found in the form of penal interest rates. The whole exercise is bound to be futile as the effect of higher prices for petroleum products, steel, cement, non-ferrous metals, petrochemicals, and other items are bound to be reflected in a larger demand for funds. The Reserve Bank should rely mainly on quantitative restrictions on credit in respect of sensitive commodities. There has also to be regulation of lending to small borrowers if it is found that the desired inputs cannot be provided even readily.

The scope for retreat has perhaps been provided because of the absence of conviction on the part of the monetary authorities when introducing new measures. The absence of any change in the Bank Rate also may be due to an anxiety to avoid an undue increase in the cost of borrowing of the central and state governments and public bodies. Is this kind of thinking and action justifiable when public spending has been the main cause of accentuation of inflationary pressures and serious fall in industrial production has taken place due to the inability of the government to enforce discipline, maintain law and order and utilise industrial capacity effectively. The answers to the developing inflationary situation lie in the maximisation of industrial and agricultural production, and all the tools are available. Only the will and ability is lacking. The Reserve Bank is adding only to the prob-



Does it matter—haven't we ground to a halt because of power shortage, oil shortage, labour uerest and what not ?

lems of industrial sectors by its actions and its directives will do more harm than good when the government is not living up to its role.

A good year for LIC

It is gratifying to note that the Life Insurance Corporation (LIC) has shown almost all-round improved performance during 1978-79. Particularly heartening are the improvements in the net lapse and the expense ratios, though small, and the reversal of the previous two years' trend of decline in the individual life insurance written. The net lapse ratio, i.e. lapses less revivals, receded to 4.6 per cent of the mean life insurance in force during 1978-79 from 5.4 per cent in the previous four years and the overall and the renewal expense ratios to 25.32 and 15.40 per cent from 25.73 and 15.65 per cent in 1977-78. The individual life business registered an increase of 2.6 per cent. In the previous two years, it had been showing a declining trend of about five per cent.

The above results, indicative of some increase in the productivity of the organisation, apparently have been attained through containing the unrest amongst employees, particularly those engaged in the field work. The improvement could have been much more impressive had the grievances of an important section of the field force been attended to more expeditiously than has been the case. Individual life business, undoubtedly, is the backbone of LIC operations in the sense that it is this business, along with the investment policy of the corporation, on which its profitability primarily depends. Group insurance, which has been concertedly fostered in the recent years and which showed an increase of 34.15 per cent last year, of course, is important from another angle—that of extending the insurance cover at low cost to a large number of people, a good majority of whom belong to the less affluent sections of society.

The total new business written by the corporation increased last year to as much as Rs 7,150.88 crores from Rs 5,805.66 crores in the previous year. The new individual life business went up to Rs 2,073.32 crores from Rs 2,020.71 crores and the group insurance business to as much as Rs 5,077.56 crores from Rs 3,784.95 crores. The average size of the new individual policies last year was Rs 11,721 compared to Rs 10,814 in 1977-78.

The first quarter of the current financial year has witnessed continuation of the last year's trend. New business worth Rs 374.62 crores had been secured till the end of June. By the end of July, the introduced business exceeded the previous year's performance by four per cent. The group insurance business continued to register striking advance (nearly 36 per cent).

The total business in force at the end of March, 1979, was worth Rs 22,666.63 crores under 213.37 lakh policies, as against Rs 20,190.22 crores under 207.74 lakh policies as on March 31, 1978. In terms of sum assured, this meant a growth of 12.6 per cent during the year, as against 12.53 per cent in the previous year and in terms of policies 2.7 per cent, as against 2.07 per cent.

overall improvement

The total income of the corporation went up during the year by 11.4 per cent to Rs 1,133.62 crores from Rs 1,017.61 crores in 1977-78. Significantly enough, the first year's premium income during the year rose to Rs 108.40 crores from Rs 101.81 crores. The renewal premium income increased to touch Rs 622.90 crores, a substantial increase from Rs 562.48 crores in the previous year. The conservation ratio of renewal premium for the year stood at 93.73 per cent—an improvement of 1.69 per cent over the 1977-78 ratio.

The rural business last year, however, did not do as well as it did in the preceding year. New business in the rural areas could be written only to the extent of Rs 461.38 crores under 5.13 lakh policies, as against Rs 494.87 crores under 5.71 lakh policies in the previous year. Appreciating that notwithstanding the difficulties involved in extending the insurance cover to the rural areas, there is imperative need of tapping the countryside for insurance in more energetic manner than has been the case in the past, because of the growing prosperity there, the corporation has launched a Rural Career Agents scheme under which carefully selected career agents in the rural areas are to be given intensive training for attracting business. The new non-medical business also showed some decline to Rs 359.89 crores on 7.19 lakh policies from Rs 395.35 crores under 8.22 lakh policies in the previous year. The progress of the salary savings scheme of course, was fairly satisfactory.

claims settlement

Although the intimated claims to be settled at the end of the last year showed an increase to Rs 36.23 crores from Rs 31.26 crores at the end of March, 1978, the total claims settled during the year showed a significant improvement. They aggregated to Rs 233 crores on 6.3 lakh policies, as against Rs 200.26 crores on 6.05 lakh policies in 1977-78. The increase in the outstanding claims at the end of the year is attributed mainly to a substantial rise in the claims intimated. Since its inception, the LIC has settled claims exceeding Rs 2000 crores in favour of 71 lakh beneficiaries. About 2,100 claims are said to be being settled every working day.

The gross yield on the mean life also registered some improvement last year—to 7.58 per cent from 7.49 per cent in 1977-78. The interest income from loans properties and investments aggregated to Rs 351.55 crores (Rs 305.09 crores in the previous year) and miscellaneous income to Rs 7.09 crores (Rs 3.09 crores). The investment policy of the corporation continued to be guided by the statutory obligations under which an overwhelming proportion of investments is made in the central government securities, state government securities, bonds of state electricity boards, state financial corporations and all-India financial corporations, the debentures of state cooperatives, land development banks, etc. Out of the Rs 632.79 crores worth investments made last year, Rs 360.98 crores worth went into these lines. Another Rs 213.28 crores were invested in such socially-oriented schemes as loans to state electricity boards, housing and water supply and sewerage. Up to the end of last year the total investment of the corporation at their book value was of the order of Rs 4,649.29 crores, while the total life fund stood at Rs 5,116.32 crores. The total contribution to the socially purposive sectors, till then had been as follows : housing Rs 633.93 crores; electricity Rs 915.97 crores; agricultural development Rs 206.45 crores; water supply and sewerage Rs 235.04 crores. A sum of Rs 119.92 crores had been invested in the industry. The LIC has also been authorised recently to assist public sector projects.

permissible limit

The investments in the private sector, however, left much to be desired, as only Rs 29.66 crores were invested in this sector last year—Rs 4.36 crores in the debentures of private companies, Rs 3.18 crores in their preference shares, Rs 6.53 crores in equity shares and Rs 15.32 crores in term loans. This fell considerably short of the permissible limit for such investments—upto 10 per cent of the accretion. Presumably, the none-too-satisfactory pace of the growth of the private sector is responsible for this phenomenon to some extent.

The situation should improve to some extent if the two proposals currently under consideration in respect of provision of institutional finance to industrial entrepreneurs materialise in the near future. These are: (I) assistance to the extent of Rs 5 crores should be made available by a central agency after project appraisal, participation by the other agencies being taken up later; (ii) the entire equity of some industrial ventures should be taken up by the financial institutions with the proviso that it should be off-loaded to the general public when the units are about to go into production.

The financial institutions connected with these two proposals include the IDBI and the ICICI. The LIC and the Unit Trust, which put premium on the safety of their funds, and quite judiciously might not join these arrangements immediately. They may come in later. But even then their participation in some of the worthwhile new ventures in the first phase itself need not be ruled out.

The improved performance of the LIC holds out prospects of some benefit of increased earnings being passed on to the policy-holders in the form of some reduction in premium rates or an increase in the annual bonus. The group of independent actuaries set up by the corporation to go into this question has submitted its report which contains a large number of recommendations. The LIC chairman has indicated that the decision on this issue can be expected by the end of this year.

It is hoped that justice will be done to the policy-holders who in the past have received somewhat step-motherly treatment, while the LIC staff; through its bargaining strength, has been able to wrest considerable concessions. A major portion of the policies taken out by the insured are not for large sums, suggesting that they are not a very affluent lot the erosion in whose saving, though forced, due to inflationary trends is nobody's concern.

The LIC also ought to liberalise its policy for the grant of loans to policy-holders for house building purposes. The proportion of the loans made available to policy-holders for house building in the overall investment of the corporation in this sector, the LIC chief himself has admitted, is very meagre.

Coal : will reorganisation help ?

The government of India is reported to be considering a scheme to reorganise the coal industry. One proposal is to set up a SAIL type organisation and the other is to decentralise Coal India with at least 10 companies instead of four as at present. In whichever way the scheme is finalised, the industry will be unable to function efficiently and achieve the targets of production unless the government is able to ensure proper coordination among the different departments and enforce discipline among the workers and officers. The current coal crisis has been persisting for several months and there seems to be little likelihood of the situa-

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IN THE NATION 587-593
Plan Goes Awry
An Unworkable Remedy
A Good Year for LIC
Coal : Will Reorganisation Help ?
Tea for STC
How to Improve Electricity Boards ?
WINDOW ON THE WORLD 595-598
Shadows Over the World Economy
Change in Afghanistan
Jute Meet in Bangkok
UK's Industry, Trade Pick Up
Japan : Anxiety Over Inflation
MOVING FINGER 599
COVER FEATURE 600
Repair, Reuse, Recycle
POINT OF VIEW
Agrarian Reform and Rural Development—*Sudhir Sen* 608
India's Nepal Policy in the Seventies—*B.C. Upreti* 611
COMPANY ANNOUNCEMENT 608b
Gwalior Rayon Silk Mfg. (Wvg.) Co. Ltd.
TRADE WINDS 614
COMPANY AFFAIRS 619
RECORDS & STATISTICS
Annual Plan 1979-80 628

tion showing a substantial improvement in the near future.

The power position in West Bengal has deteriorated since the beginning of September and one of the important causes has been the shortage of good quality coal. The tea industry has complained about the scarcity and high prices of coal and has requested for the allotment of grade-I quality only from the West Bengal coalfields and for the simplification of the procedure for the issues of road permits. Paper mills have also been forced to curtail production due to the irregular supply of coal and, at the same time, they have been unable to arrange for the prompt dispatch of paper and paper boards for want of wagons. The rubber, textiles, chemicals and several other major industries continue to experience problems in getting their requirements of this essential raw material. The movement of coal by road has sharply pushed up transportation costs. Even industrial units manufacturing products for defence purposes have been hit hard on account of coal shortage. The railways themselves have not been able to get steam coal and have been compelled to suspend some goods and passenger trains.

chaotic situation

In this kind of choatic situation, one wonders how far the reorganisation of Coal India is really going to help the country to raise more coal and arrange for its proper distribution. Coal production in recent years has fallen far below the targets. For 1976-77 the target was 108.00 million tonnes, but the production was 101.02 million tonnes. In 1977-78, against the target of 113.50 million tonnes, the output was 101.00 million tonnes. In the next year, the industry produced only 101.90 million tonnes against the target of 124.00 million tonnes. In West Bengal, which produces superior quality coal, the output has remained stagnant for the last six years. In 1973-74, the state produced 19.36 million tonnes, while in 1978-79 the output was 19.90 million tonnes.

The coal production targets have been tentatively fixed at 200 million tonnes in 1987-88 and 400 million tonnes in 2000-01. These figures will need revision in due course but, at whatever level the targets are fixed, they can be achieved only if the scheme of reorganisation is carried out in a rational and realistic manner and the central cabinet is able to ensure that the economic ministries function in close cooperation and understanding. Even then, how is the government going to motivate the workers to improve productivity ? Numerous suggestions have been made for this purpose, but the government has been unable to implement them. Indiscipline in various forms as well as widespread absenteeism continue to hinder production.

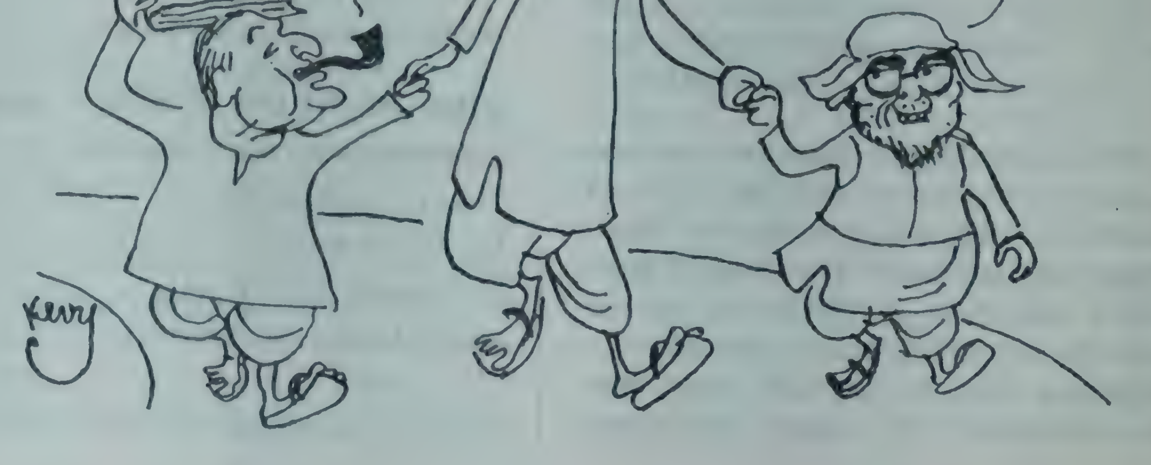
Meanwhile, the central cabinet has cleared several projects for the development of the coal industry and granted a moratorium on the cumulative loss of Rs 511 crores incurred by the nationalised coal sector by way of non-plan support. But what effective steps are being taken to cut down the losses in the coming years ? The problems of the coal industry in India have to be tackled more seriously and energetically than before. The previous attempts at reorganising the industry have failed to produce the desired results. The government, therefore, should learn the appropriate lesson from the past experience while introducing the new set-up for the coal industry.

Incidentally, it is interesting to note that, according to a spokesman of the central ministry of Steel, Mines and Coal, it is proposed to employ independent private agencies to determine the actual grades of coal and control the quality. The private sector has lately expressed interest in associating itself closely with the production of coal in new areas. Will the government be willing to consider this proposal favourably?

Tea for STC

THE STATE Trading Corporation has recently taken an export licence from the Tea Board and has decided to make vigorous efforts for promoting the exports of tea. It has already secured export orders worth Rs 2.3 crores. Its initiative in this direction is reported to have been appreciated by the Commerce ministry. But what are the reasons that have prompted the STC to take up the export of a traditional item like tea?

Tea exports in the current year have shown a substantial improvement. Between April and June, the exports were 43.2 million kgs compared to 27.0 million kgs in the corresponding months of 1978-79. In the same period in 1977-78 and 1976-77, the exports stood at 35.9 million kgs and 32.5 million kgs respectively. Thus, the STC has entered the field of tea exports at a time when the trend has been encouraging. It may be argued that since the STC has been engaged in the export of coffee and sugar for the past


GROVER COMMN. REPORT
CHOUDHARIJI, I DEMAND ACTION ON THE GUPTA COMMISSION REPORT

many years, there cannot be any objection to its handling the export of tea as well. But it can justify this step only if it helps to promote the export of tea to new markets as well of non-traditional items like packet tea, instant tea and tea bags. Has the STC drawn up its export strategy from this angle? Has it made any market surveys and analysed the nature and extent of the competition it has to face?

The STC is reported to have secured an order from Hungary for tea bags of 90,000 kgs, from Syria for 750,000 kgs of bulk tea and from Yemen for 250,000 kgs of bulk tea. But what really has been the role of the STC in securing these orders? It is worth noting that Indian tea bags are already being exported to many countries of west Asia, north Africa and east Europe. The total value of tea bags exported increased from Rs 27 lakhs in 1974-75 to Rs 59 lakhs in 1975-76 and Rs 106 lakhs in 1976-77. The exports of packet tea in these years amounted to Rs 8 lakhs, Rs 17 lakhs and Rs 19 lakhs and of instant tea to Rs 85 lakhs, Rs 191 lakhs, and Rs 250 lakhs, respectively. The offer of cash compensatory support at the rate of 10 per cent has been helpful to give a boost to the exports of these forms of tea. It will, therefore, be worthwhile to know how the STC proposes to augment the earnings from the exports of these types of tea and on what markets it is going to concentrate.

new markets

Most of the tea bags so far have been exported to Iran, the United Arab Emirates, Kuwait as well as to Czechoslovakia and Poland. The exports of packet tea to west Europe and America have been negligible, most of it going to the countries of west Asia and north Africa. Similarly, tea bags have been exported mainly to west Asia, north Africa and east Europe. The STC, therefore, should try to step up the exports of such value-added items of tea to the markets in west Europe and the US while not neglecting the other areas. For instance, the west Asia and north Africa region, which has a population of over 160 million, imports about 160 million kgs of tea. But India's share has been only of the order of 50 million kgs. The imports of packet tea in this region are said to be picking up rapidly. The STC should be able to secure good business from this area.

The STC's entry into tea exports will, of course, help to improve its overall earnings. In 1978-79, the total earnings of the organisation from exports amounted to about Rs 608 crores compared to Rs 557 crores in the preceding year. But its performance should be seen not so much with reference to its total earnings but by the extent to which it has been able to export difficult items and discover new markets. As regards tea, the STC should not merely duplicate the export efforts already being made by the private sector and the public sector agencies. It should be able to show some significant results especially in finding new markets for tea and in giving a strong stimulus to the exports of value added items.

How to improve electricity boards?

MANY USEFUL suggestions have been made by the Association of Indian Chambers of Commerce and Industry (ASSOCHAM) in its memorandum to the Rajadhyaksha committee's finance panel on improving the financial performance of the state electricity boards as well as to contain the costs of new projects to be handled by them and bringing down their operating ratios. The memorandum stresses that there is urgent need to improve the financial conditions and management of electricity boards, particularly in the eastern and northern regions. Except for Uttar Pradesh, the break-even points of all other boards could be reached by enhancing capacity utilisation alone to around 70 per cent with commensurate stepped up revenue realisation.

It has been stressed in the memorandum that in addition to audit by the Auditor-General, there should be public audit by chartered accountants who, in addition to the true and fair nature of accounts, should also be required to comment of the nature and efficacy of the systems of internal audit of the SEBs. The boards must modernise and rationalise their current systems of revenue realisation, reducing drastically the heavy dependency on inefficient manual efforts. The debtors index should be targetted not to exceed 60 days within a reasonable time-frame. Automated billing, consumption monitoring, defaults and the related management information system should be introduced without delay. The norms of financial working of SEBs suggested by the Venketraman committee should be reviewed expeditiously.

greater control

The growth of new fixed assets and facilities of the SEBs should be subjected to greater control with expansion of activities to improve the existing assets turnout ratios to an acceptable level of not more than 0.7 over the next ten years. The operating ratios should be brought down to a level not exceeding 0.5 over the next five years through progressive improvement in operational efficiency, over-manning situation, high establishment cost, etc. Realistic capital estimates of power projects with built-in factors of inflation, contingencies backed up by an efficient and standardised cost monitoring system is a pre-requisite to preventing repetitive shortages of funds during the execution of such projects. As loans are the major source of finance for all expansion, modernisation and rehabilitation programmes of power projects, the licencees should be allowed to create debt redemption reserves to enable them to service their debts.

The generation development programmes in all states having significant hydel potential, it has been suggested, should be oriented to achieve equal shares of hydel and thermal generation by the end of seventh Plan period so that the overall energy costs can be brought down. This will entail mobilisation of larger finances to take care of the capital-intensive hydro electric projects having relatively long gestation period. Each region, it has been stressed, should optimise thermal/hydro/nuclear mix at the regional load despatch centres consistent with reliability requirements of integrated and isolated operations so as to achieve a minimum practicable generation cost.

The method and procedure for tariff formulation and revision criteria, it has been emphasised, should be drawn up objectively by an all-India tariff appraisal committee. The price structures for inter-state power exchanges should also be rationalised.

UNITED ASIAN BANK BERHAD

Condensed Statement of Affairs 1978

(Figures in Malaysian Ringgit)

		1.1.1973	31.12.1973	31.12.1974	31.12.1975	31.12.1976	31.12.1977	31.12.1978
CAPITAL AND LIABILITIES								
Capital Authorised	($'000)	—	25,000	25,000	25,000	25,000	25,000	25,000
Issued and paid up	($'000)	—	10,000	10,000	10,000	10,000	20,000	20,000
Share Premium		—	—	—	—	—	272	272
Reserves & Surplus	($'000)	—	951	2,170	5,251	9,335	13,863	19,054
Current, Fixed, Savings & Other Deposits of Customers	($'000)	96,727	134,881	226,208	316,837	462,430	642,065	735,475
Deposits & Balances of Banks & Agents	($'000)	12,384	13,371	13,075	38,558	72,185	32,767	61,116
Bills & Drafts Payable	($'000)	—	2,756	1,697	1,682	3,438	4,332	6,470
Branch Accounts	($'000)	—	—	2,097	—	9,092	—	—
Other Liabilities including Provisions	($'000)	5,603	4,255	11,436	16,386	28,998	47,138	66,400
Total	($'000)	114,714	166,214	266,683	388,714	595,478	760,437	908,787
ASSETS								
Cash & Balances with Banks & Agents	($'000)	25,612	38,844	47,215	69,118	109,264	98,990	93,506
Investments (at cost): Malaysian Government Securities &Others	($'000)	18,874	20,762	37,911	50,542	63,715	92,904	131,741
Bills Receivable	($'000)	24,180	36,419	75,664	87,189	165,626	222,601	226,004
Advances to Customers	($'000)	40,034	64,296	98,203	170,137	234,512	322,076	428,277
Bank Premises and equipment at cost, less amount written off	($'000)	4,830	4,832	5,624	6,384	13,037	14,483	14,564
Other Assets	($'000)	1,184	1,061	2,066	3,717	9,324	9,383	14,695
Branch Accounts	($'000)	—	—	—	1,627	—	—	—
Total	($'000)	114,714	166,214	266,683	388,714	595,478	760,437	908,787
Liabilities on Acceptances & Guarantees	($'000)	43,812	86,125	171,540	247,249	408,117	434,985	520,765
Balance Sheet Totals	($'000)	**158,526**	**252,339**	**438,223**	**635,963**	**1,003,595**	**1,195,422**	**1,429,552**
Dividend	(%)	—	—	6	6	7	8	8
Net Profit	($'000)	—	1,730	3,280	7,040	9,379	11,187	12,251
Number of Branches		11	10	16	20	26	28	29

Shadows over the world economy

THE 1979 annual report of the International Monetary Fund, released this week, suggests that there is little hope of the major industrial nations finding soon answers to their economic problems. The problems may even get worse.

The industrial powers, the report says, already have miscalculated the degree of the economic slowdown in the world this year. It will be steeper than was first thought in part because the US is sinking into a recession. The major nations have little choice except to try to deal gradually with problems of sluggish economic growth, high inflation and rising energy prices, even though this approach has not worked so far. The chief reason for the miscalculation, the report suggests, has been the steep increase in oil prices, which was not foreseen.

The IMF has cautioned that the effects of the US recession may not be fully offset by the growth in other industrial nations, because such an effort would worsen inflation in other countries. The US authorities, it says, should be 'very cautious' in adopting policies to counter the recession. There should not be any lowering of the priority that has been accorded by the US authorities to the reduction of inflation in a medium-term context.

The IMF has urged the industrial nations to coordinate their economic policies to a greater degree than they have done before, including exchange market intervention and monetary policies. It has also stressed that the industrial nations should ensure a larger flow of private capital and Official Development Assistance to underdeveloped countries, which, it points out, will be particularly hard-hit by high oil prices and the world-wide economic slump. The debt service charges, it emphasis, are rising faster in some underdeveloped countries than the debt itself and faster than export earnings.

The economic performance of the low-income group of developing countries, which contain more than two-fifths of the population of all Fund members, the report says, is clearly a major cause for concern in terms of human welfare.

The report stressed that little visible progress has been made with respect to several of the most fundamental economic problems confronting the world economy. Both inflation and unemployment remain much too high in most member-countries and the efforts of national authorities to deal with these persistant problems have proved less effective than might have been hoped. Attention is called to a rather general renewal of upward momentum in rates of inflation that was apparent during the first half of 1979, and to the probability that the oil prices increases introduced at mid-year will bring further upward pressures on prices.

Another disturbing development emerging during the current year, it is pointed out, is the sharp resurgence of the combined current account deficit of the non-oil developing countries. At a time when they cannot expect buoyant growth of demand in the industrial world to facilitate expansion of their export earnings, and when costs of imports are rising rapidly, many of the non-oil developing countries—and particularly the poorer ones—may face difficulty in attaining desirable growth rates because of insufficient financing for the volume of import of goods and services that such growth rates would imply.

The report further stresses that the 1979 oil price increase, along with its marked effects on international payments positions, will have an adverse impact on rates of inflation and on the pace of economic activity in oil importing countries. The question of how the policies of those countries should respond to the 1979 increases in oil prices is said to be an issue commanding immediate attention. Several aspects of this response are discussed in the report. First, and of fundamental importance, it asserts, is the need to conserve energy and develop additional sources of supply. For both purposes, realistic pricing policies for energy are considered a prime requisite. Second, with wage-earners trying to prevent or recoup losses in real earnings; governments face the difficult task of limiting the indirect effects of the oil price increase on the general level of prices. Third, the policy reaction to the deflationary impact is bound to vary widely among countries, but many countries with relatively high rates of inflation or weak external positions will doubtless find it advisable to accept—not to offset—that impact. Fourth, the authorities in many oil importing countries will have to contend with a deterioration in the current account position, with the policy reaction depending on individual circumstances.

The forthcoming Fund-Bank meeting at Belgrade—for the first time in a Communist country—will codsider the establishment of the substitution account which could help promote the Special Drawing Rights as a principle reserve asset and into which member nations could deposit unwanted American dollars. The purpose is to help stabilise world currency markets. The proposal has for long been opposed by the US, but recently it withdrew its objections, thus paving the way for its acceptance by the world's Fnance ministers. The proposal might be approved in principle at Belgrade.

Change in Afghanistan

MR HAFEEZULLAH Amin, who has assumed full control of the government in Afghanistan, is considered to be a hard-line communist. Mr Noor Mohammad Tarakki, who has been ousted, came to power in April, 1978, following a bloody coup which toppled the government of Mohammed Daoud. Mr Tarakki, a scholarly poet-politician, was considered a less ardent communist than many members of the pro-Soviet Khalq (People's) Party.

Although radio Kabul stated last week that Mr Tarakki was stripped of all his posts, including that of secretary-general of the Khalq Party, it was feared that he might have been killed. Radio Kabul also reported that Mr Amin took over as president, but gave no other details of the new government line-up.

Radio Kabul had also reported that three new ministers had been named to the cabinet. Mr Faquir Mohammad Faquir replaced Col. Aslam Watanjar as minister of Interior, Mr Sahib Jan Sahraj replaced Mr Sher Jan Mazdooryar as minister for Border Affairs and a man identified only as Zareef was appointed minister of Communication. Mr Watanjar had played a prominent role in the 1978 coup against Mohammed Daoud and was also associated in 1974 coup against King Zahir Shah which brought Daoud to power. The change in the Interior and Border Affairs ministries indicated that the government's fight against rebels was not going well.

muslim insurgency

The 50-year-old Mr Amin controls the secret police and is reported to have an independent network of informers, preempting any moves of his opponents to develop independent basis of power. Criticism of Mr Amin has centered on his heavy-handed approach to reform programmes and his direction of the fight against the rightist Muslim insurgency.

Only last month Mr Amin, had shifted from the ministry of Foreign Affairs. With the background of his experience, he was then considered the obvious choice for streamlining the defence forces to meet the challenges posed by continued insurgency.

The anti-insurgency activities of Afghanistan are being streamlined and in order to better organise and lead the country, Mr Amin had been made the principal instrument to put into effect the policy of the government. Mr Aslam Watanjar, who was the Defence minister was moved over to the ministry of Interior in place of Mr Shibian Mazdooryar, who took over the ministry of Border Affairs. Both these ministers were of crucial importance in the context of the efforts made by the regime to be friendly among the tribal elders and ulema. But unfortunately both of them have been liquidated along with Mr Tarakki according to a recent report.

The choice before the Soviet Union is to support Mr Amin even if it had liked the idea of using the charisma of Mr Tarakki to minimise the adverse impact of anti-insurgency moves. In fact, the Soviet commitment will increase and the level of defence assistance will also rise. Already the Soviet Union is sending advisers and equipment. As many as 1,500 Soviet military advisers and 3,000 civilian advisers have been reported to be involved in the recent fighting.

Jute meet in Bangkok

AFTER THREE years of protracted negotiations, the jute producing countries have finalised the draft on the international jute agreement. At a meeting held in Bangkok recently, the representatives from India, Bangladesh, Thailand and Nepal agreed in principle on this accord on the same lines as the International Tea Agreement. Burma, one of the producer countries, could not participate in the deliberations.

The draft of the agreement will be put before the jute consuming countries in Geneva in November next. It is hoped that agreement will be finalised there. Among the consumers participating at the Geneva meet will be the US, the EEC and the USSR.

In Dacca and Calcutta, the two jute capitals, the meeting generated an air of hope after a long time. With oil prices going up, synthetic products for packaging have become costly. For instance, the Australian wool interests have grumbled to some jute producers that they are finding synthetic packing too expensive and could switch back to the natural fibre. The US market had indicated that the long lost primary carpet backing market can be recaptured. Demand from the Socialist countries is also increasing with independent inquiries coming recently from Czechoslovakia, Bulgaria, Hungary and Romania, in addition to the traditional sales of jute goods to the Soviet Union.

Apart from the higher oil prices making synthetic products costly, continued inflation in the industrialised world is making the products from the developing world more competitive in the advanced countries. However, there is a need for the producing countries to put their own houses in order to make the best of the new opportunities. In the past, chances have been lost sometimes through competition and over-production among the producers and sometimes through sloppy production of finished goods and failure to deliver on time or to the required quality.

Even though India and Bangladesh dominate world jute production, keen international rivalry has prevented agreement in the past. A critical factor is to ensure that pricing policies are sufficient to ensure a good crop. In India, for instance, the committee on Public Undertakings of Parliament this year recommended that the minimum price for raw jute should be set at Rs 447 a quintal, but the statutory price was fixed only at Rs 150 a quintal giving a market price of around Rs 220 a quintal. The one thing which assures a good crop is providing the farmer with a good price. In Bangladesh also the government has found it tricky to judge the comparative prices and in consequence the crop has fluctuated widely. Whereas before 1970 the harvest was six million bales in an ordinary year and seven million in a good year, since 1971 it has fluctuated between 6.5 million and 3.9 million.

At present Bangladesh's jute crop is expected to fall below five million bales inspite of intensification of the programme to put more land under the new improved jute seeds. Smaller jute crop is likely to squeeze the Bangladesh economy hard because the fibre literally offers a lifeline. Traditionally, earnings from the jute and jute goods sales have made up between 80 and 90 per cent of exports. Last year, thanks to vigorous promotional efforts the jute goods contributed to about 68 per cent of total Bangladesh exports.

The representatives at the Bangkok conference had to understand that if jute is to survive, then buyers need to be assured that there will be fibre available, of the right quality, at the right price and at the right time. Imagine the carpet manufacturer in America, or even the cement maker in the Middle East who wants bags. He wants guaranteed supplies all the time. It is no use telling him that the ship is stuck in the port because of a go-slow or that the mills are disrupted by disputes between one union or the other. Given the location of the countries and the domestic problems they face, much more is required to be done right from the fields to the factories and to the docks.

Winning a contract is only the start. China, for instance, has expressed unhappiness about the quality of some of the jute goods exported by Bangladesh. In Dacca, where the mills are still strugglin to achieve constant quality, and in Calcutta, where there are 11 trade unions always liable to squabble and an uncertain port, there are so many basic problems to sort out before jute can have its boom.

A dream car

A nearly pollution-free "dream" car that runs entirly on hydrogen was put on display recently by its developers at the Musashi Institute of Technology in Tokyo. The "Musashi 3", a converted 550 cc vehicle developed by the university's internal combustion engine research laboratory, cruised smoothly at speeds of 40 and 50 kilometres per hour around the campus

Research team chief, Prof Shoichi Furuhama said the hydrogen-powered vehicle can attain speeds of 120 KPH and usually emits nothing but steam from the exhaust pipe. Only when the accelerator is pushed to the floor will a slight amount of nitric oxide pollutant be emitted.

The vehicle operates on a two-cycle engine propelled by spray and combustion of liquid hydrogen which has been converted to gas.

UK's industry, trade pick up

THE INDUSTRIAL production as well as exports of Britain are looking up. The output in the manufacturing sector recorded an increase of two per cent between May and July over the preceding three months' figure. Compared to the corresponding period in 1978, it was up by 3.5 per cent.

The total industrial production of Britain, however, was three per cent higher during the three months to July compared to the preceding three months and 4.5 per cent more than in this period last year. The higher growth in the overall industrial output is attributed to the large contributions of North Sea oil and gas which rose by 50 per cent during the 12 months to July.

Apart from oil and natural gas, the other sectors which have registered significant expansionary trends include engineering and metal manufacture. There has also been a marked improvement in construction during the three months to June.

The latest Department of Trade survey holds out prospects of a seven per cent increase in exports during the July-December period, a substantial improvement over the performance in the first half of this year. If the expectation about the growth in trade during the six months to December materialise, this would result in a volume rise of about three per cent in exports during the current calendar year—a slightly more buoyant picture than the two per cent increase envisaged when the last such survey was published in June.

The outlook for 1980, however, is considered to be less favourable, with the possibility of export volume again dropping to some extent. The slow growth in exports during the first half of this year is attributed partly to the loss of markets in Iran and Nigeria and possibly also by cancellation of orders following the road haulers strike at the beginning of the year.

Japan: anxiety over inflation

The declining trend in the wholesale prices index of Japan, witnessed since the second half of 1977, got reversed in November last year when the WPI recorded an increase of 0.2 per cent over the figure for the previous month. The inflationary tendencies in the Japanese economy have worsened considerably since then, the rate of increase in the WPI relative to the preceding month being 0.6 per cent in December 1978, and January 1979, 0.9 per cent in February and March, 1.7 per cent (22.4 per cent per annum) in April and 1.6 per cent (21 per cent per annum) in May.

Although this uptrend has been much less than the world-wide inflation of 1973 and 1974, when wholesale prices in Japan went up by 30 per cent and consumer prices by more than 20 per cent, the upward thrusts on the price level are reported to be causing a good deal of anxiety in the country. The rate of inflation in the Japanese economy was 3.8 per cent in 1975, five per cent in 1976 and just 1.9 per cent in 1977.

Three factors are said to be responsible for the inflationary trends gathering momentum in Japan. These are: (i) increased prices in the international commodity markets and specially for crude petroleum; (ii) a drop in the yen-dollar exchange rate; and (iii) development of favourable market conditions for industrial products within the country as a result of the tightening domestic supply and demand balance. Increased prices of imports are a cost-push factor which is showing up in the change in the domestic wholesale prices.

Bulk of Japan's imports consisting of raw materials (primary commodities) and fuel (petroleum), the imports of both these categories have become much costlier. The rise in the import prices of raw materials is attributed primarily to the increased demand following improved production activity in the OECD countries on the demand side and production not increasing in the exporting countries due to political strife and the attitude of favouring conservation of resources on the supply side. Japan depends for 99.9 per cent of its petroleum requirements on imports.

More than anything else, an increase in the prices of petroleum pushes up Japanese import costs materially. Moreover, the Japanese economy being vulnerable to petroleum, this induces speculative selling of yen which tends to lower the yen-dollar exchange ratio. After hitting a peak at $1 = 175 yens in October, 1978, the yen-dollar exchange rate fell to $1 = 240 yens in May last. It improved slightly by mid-June to the level of $1 = 220 yens.

As a result of the double shock represented by the upsurge in the prices of items imported by Japan and the decline of the yen exchange rate, the average import price index rose by 23.2 per cent (annual rate 51.8 per cent) between October 1978 and April 1979.

phase of recovery

As regards the domestic supply and demand balance, the domestic demand is said to have entered a phase of recovery since the last quarter of 1978. Exports, which had previously supported the economy, had started to decline in the April-June period. Led by government spending and personal consumption, the direction of the economy had come to be determined by domestic demand. In the October-December period, growth of equipment investment also picked up and inventory investment, which had been a negative figure till then, turned around and became a positive figure.

The renewed activity in equipment investment is attributed to (1) corporate spending for rationalisation and reduction of labour requirements being continued; (ii) investment in renewal of facilities emerging as a stronger force after four years of stagnation: and (iii) even though equipment investment in manufacturing has been down it has been up in non-manufacturing, notably in retail trade's and services, and has remained firm.

Inventory investment became a positive figure because (i) by about the summer of 1978, the downward adjustment of inventory levels had been pretty much completed, and (ii) in addition to the building up of inventories on the basis of real demand anticipated as a result of recovery of demand, there has been building up of inventories on the basis of fictitious demand arising out of the expectation that market prices would increase in the future.

supply capacity

In contrast to the high rate of growth of demand, the supply capacity has expanded only at a mild pace. The annual growth of production capacity in manufacturing has fallen to the level of 1 to 2 per cent. In the case of taxtile industry, the production capacity has even gone down.

The reason for the slackening of the rate of growth of production capacity is that during the prolonged recession, which began in 1974, the manufacturing concerns kept the lid on equipment investment, worked at paying off debts, reduced employment levels and thereby reduced their fixed cost burden. There was relatively little replacement of equipment with the result that the vintage of capital stock increased—in manufacturing from an average of 5.8 years in 1971 to 7.1 years in 1977. As spending for maintenance and repairs of the existing equipment was also kept as low as possible, the obsolescence of equipment got accelerated.

Against the above backdrop, a feeling seems to be developing that although much depands on what happens in connection with petroleum, there is considerable probability that wholesale prices in Japan will rise even more in the coming months. The consumer prices will go up after some time lag. This will give a push to increase in wages next year. Further inflation may follow. Fear is growing and as a result of that, the economic activity will decline and stagflation will return.

MOVING FINGER

The Law minister in the caretaker government, Mr S.N. Kacker, it is apparent, is more enthusiastic about his political career than is warranted by his qualifications for it. Referring to Mr H.R. Khanna's hurried abdication of the Law portfolio, Mr Kacker had said that he himself had no hesitation in taking on the job since his experience as mayor of Allahabad had given him confidence that he could live with the rough-and-tumble of party politics. This, however, has not saved him from stumbling on the first tricky occasion. Talking to newsmen in Allahabad about the implications of the Gupta Commission report for Mrs Indira Gandhi's eligibility to contest elections, he delivered himself of views which needlessly created both confusion and controversy. The impression was given that steps would be taken to debar Mrs Gandhi from offering herself as a candidate at the mid-term poll and subsequently there was some government-inspired kite flying about an ordinance being issued for the purpose.

It goes to the credit of the Janata leaders that they were the first to oppose the suggestion. They argued that it was necessary for the political process that Mrs Gandhi and her party should be squarely faced at the hustings so that the electorate got a chance to express itself on her bid to recapture power. They also pointed out, quite rightly, that it would be a gross political impropriety on the part of the caretaker government, which has no parliamentary legitimacy, to take action against political opponents outside the normal processes of existing laws, especially as any contrary conduct on its part must, in the context of the mid-term poll, expose it to the charge that it is thwarting the electoral process. Other political parties and their leaders or spokesmen have also taken a similar stand, with the result that the caretaker government has been left high and dry.

Mr Kacker, who without doubt has been responsible for its embarrassment, has had to make amends by publicly declaring that there is no proposal to promulgate an ordinance to disqualify Mrs Gandhi for contesting the coming Lok Sabha election. Incidentally, it is a fair guess that, even if the Charan-Chavan ministry were to decide in favour of issuing an ordinance of this kind, it would not have succeeded in persuading the president to put his signature to it. Mr Sanjiva Reddy is too wily a politician to do anything that might diminish his post-poll options.

Delhi Doordarshan included Mr Kushwant Singh and Mr Arun Shourie in a four-man panel which was supposed to discuss the Gupta Commission report on the Maruti affair. The idea, evidently, was that this particular composition of the panel would establish the impartiality of the TV establishment in its anxiety to secure a balanced exposition of views on a subject which was bound to be sharply controversial. This worthy objective, however, was defeated by Mr Inder Malhotra who acted as master of ceremonies. He turned the discussion away from an examination or even exchange of views on the findings of the commission and their meaning for the reform of administration or public life. Instead, he aggressively appropriated the time of the panel to air the editorial views already expressed by *The Times of India* in condemnation of Mr Chandra Shekhar's conduct in initiating the publication of the report and thereby forcing the caretaker government to effect its official publication. Indeed, Mr Malhotra seemed to think that the Janata party's attempt to make political capital out of the report was a graver crime than all the illegalities and improprieties on the part of the Gandhis, mother and son, or the ministers and officials in connection with "Maruti affair". So carried away was Mr Malhotra by his righteous indignation that, at one place, he even used the word "damn". Now, I would be the last person to be squeamish about this, or, indeed, any other four letter word but Mr Malhotra who, evidently, does not seem to be watching his weight, should surely beware of permitting himself the luxury of tension-ridden expletives. Could it be that, finding that Mr Kuldip Nayar and Mr B.G. Verghese have been offered sponsorship by the Janata party for contesting the election, Mr Malhotra is trying to qualify for like consideration by the Congress party of Mrs Gandhi?

In fairness to the resident editor of *The Times of India*, however, it must be said that he did snub valiantly Mr Kushwant Singh when the latter tried rather stupidly to argue that he would not and could not place any credence on the Gupta Commission findings since his own enquiries had convinced him that Mr Bansilal and Mr Sanjay Gandhi had not been guilty of any malpractices in the matter, for instance, of the acquisition of land for the Maruti factory. Mr Malhotra brutally retorted to the effect that Mr Kushwant Singh just could not claim for his investigations or conclusions equal validity with the findings of a judicial commission which had been shifting a mass of documents and evidence.

Mr Shourie's participation, I must add, was not only subdued but quite flat. It tended to be metaphysical where it failed to be philosophical. So much so, if one were to believe him, we must blame our stars rather than the Gandhis for our having been taken for a ride on Maruti. Some crusaders want to make us better men. Others (whether more ambitious or more pious) seek to make the world a better place to live in. Mr Shourie seems to belong to the latter category.

VB

Cover feature

Repair, reuse, recycle

By courtesy of Worldwatch Institute, a private non-profit research organisation created to analyse global problems, **Eastern Economist** *reproduces here a richly documented analysis of the twin problems of "Waste and Want" which faces the human race as it is headed towards the twenty-first century. While the growth of population and the global quest for ever rising standards of consumption are making extortionate demands on the finite resources available onland, sea or in the air, man's chronic propensity to waste reusable materials is certainly helping to define adversely the limits to growth. Mr Denis Hays, a senior researcher at the Worldwatch Institute, who has held or is holding responsible positions in agencies engaged in environmental and conservation matters, explains in this article the many ways in which materials which are now merely thrown away could be repaired, reused and recycled in a continuous and self-sustaining process of helping the world to avoid a bankruptcy of key commodities.*

Today, it is technically possible to recover at least two-thirds of the resources that most people waste. With some thrifty life-style changes, using products designed for durability and for ease of recycling, the waste streams of the industrial world could be reduced to a small fraction of their current size. And with an intelligent materials policy, the portion of our resources that are irretrievably dissipated could eventually be reduced almost to zero.

Waste is a human concept. In nature, nothing is wasted, for everything is part of a continuous cycle. Even the death of a creature provides nutrients that will eventually be reincorporated into the chain of life. The idea of waste springs from a perception of most material by-products of human activity as useless. But one person's waste newspapers are another person's recyclable fibres or cellulose insulation. Disposable plastic containers that are discarded without thought by the Japanese would be carefully used and reused by tanzanian villagers. The Japanese, in turn, are aggressive purchasers of scrapped US automobiles. And the concept of waste varies over time. Much of what was thought to be the waste of the pulp and paper industry some decades ago is now a source of fuel and chemical feedstocks. The designation "waste" is thus, a product of judgment and circumstances.

The term "consumption" is similarly ambiguous. A newspaper, for example, has been "consumed" when the purchaser has finished reading it. A product may be thought of as consumed when it has provided all of the usefulness that its owner expects from it. Thus, a perfectly good pair of shoes, or even a perfectly functioning automobile, will be thought of as consumed if changing styles persuade the owner to discard the older products for something newer.

Worldwide, mineral consumption is now increasing by seven per cent annually. If continued, such growth would lead to a 32-fold increase in mineral use in just 50 years. Modern economies are geared toward an endless increase in material consumption and the generation of ever-larger volumes of waste. Underlying this is an implicit policy to encourage the use of virgin materials. Many policies that were designed long ago for the protection of fledgling industries remain on the books. The mining and extractive industries, for example, are often given more favourable tax treatment than are industries based on the use of recycled materials. The full costs of environmental damage due to mining have not been internalised and hence the prices of virgin materials do not reflect the full social burdens their extraction imposes. Secondary materials are often discriminated against in government procurement specifications, freight transport tariffs, and so on.

Moreover, the institutional structure does not adequately discourage the generation of waste. For example, the charge for waste pickup often remains constant regardless of how much is produced. Waste disposal charges are often artificially low because the environmental cost of disposal have not been considered. Where efforts have been made to overcome these imbalances, significant progress has often been made.

One hundred per cent recycling will never be a genuine option. Rather than leaving materials in a concentrated form, much human activity dissipates them to an extent that sometimes approximates their average abundance in the earth's crust. Such uses, although often having merit in the short run, dramatically reduce the chance of successful recycling in the long run. For example, 50 per cent of petrochemical feedstocks become commercial solvents, detergents, gasoline additives, antifreeze, dyes, pesticides, and pharmaceuticals—all of which are effectively lost as soon as they are used. The lead concentrated in storage batteries can be recycled easily; the tetraethyl lead added to motor gasoline is lost forever, except us a pollutant.

Society can minimise the extent to which materials are dissipated by use. For example, the substitution of ethanol—a high octane fuel obtainable from biological crops—for gasoline could eliminate the need for lead anti-knock additives. This, in turn, would eliminate the principal source of atmospheric lead and the health problems it entails, simplify the recycling of lead, and convert motor vehicles to a fuel that will be available long after oil.

In a future sustainable world, what we currently think of as waste will become our major source of supply of high-quality materials for industry and commerce. One important benefit will be the diminishing contribution of rising raw material prices to inflation. Increasingly, virgin ores will play a minor, supplementary role to the existing material inventory. Recycling will become a central organising principle for the entire economy.

Resource Supplies: Stringent limitations on the production of several minerals from raw ores are unavoidable within the next half century. For some, the turning point may be encountered far sooner. By the time this turning point is first reached, the world must have learned how to live comfortably with a finite, non-growing stock of the material in question.

It is sometimes argued that since the entire planet is composed of minerals, the fear of running out of supplies is ridiculous. Such a notion rests upon a very loose definition of "supplies." All the minerals with which human civilisation will be sustained are located in the four-tenths of one per cent of the earth's mass constituting its outer crust. Of this, only a trifling fraction may be legitimately viewed as potential supplies. The remaining minerals are in such dilute concentrations or at such great depth in the crust that the energy and environmental costs of mining and concentrating them will always be prohibitive.

Broadly speaking, minerals can be grouped in two categories: "reserves" and "resource." Reserves are generally defined as known deposits that are extractable with existing technology at current prices. The term has great utility, but it must not be misused. As a case in point, Zambia has no copper reserves because that country's copper cannot be economically extracted at today's world price. Yet Zambia has some of the world's largest deposits of copper, much of which will be mined eventually. "Resources" is a much broader category that generally encompasses the total mineral base that can be extracted. Clearly, resource estimates also involve confusing uncertainties and are dependent upon one's judgment of tomorrow's prices, tomorrow's technology, and tomorrow's supply of affordable energy.

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An average cubic kilometer of rock drawn from the earth's crust contains 200 million metric tons of aluminium, 100 million metric tons of iron, 800,000 tons of zinc, and 200,000 tons of copper. But such figures are meaningless. The mineral producer is not interested in average rock, but in uncommon rock: ore that is disproportionally rich in one or more minerals and that can be economically extracted, transported, and refined. The average amount of lead in the continental crust, for example, is 0.001 per cent, while lead ore generally contains between two and 20 per cent lead. Twelve elements account for 99.23 per cent of the mass of the earth's crust. Of these abundant elements, five are metals that are widely used in industry; aluminium, iron, magnesium, titanium and manganese.

Most metals do not ordinarily appear in nature in their elemental states. They are combined with other elements in crystalline, inorganic compounds. To obtain these metals for human use, those ores must be refined of non-metallic impurities. The refining process, which involves the breaking down of stable compounds, is very energy-intensive. In order to minimise the energy needed for refining, the mineral industry prefers to use sulphides, oxides, hydroxides, and carbonates rather than the refractory silicate minerals that constitute most of the earth's crust.

For several years, interest has been growing in the mining of large deposits of manganese nodules from the ocean floor. These potato-sized nodules contain 25 to 30 per cent manganese, and are also rich sources of nickel, copper, and cobalt. There appear to be no insurmountable technical difficulties in mining them; Ocean Management, Inc., a consortium of Canadian, the US, German, and Japanese companies, has already successfully drawn 850 tons of nodules from the Pacific, south-east of Hawaii. Such activities, however, will be enormously expensive, requiring at least a doubling in copper prices and a 50 per cent increase in nickel prices for economic operation. Deep-sea mining will also be energy-intensive, probably sucking nodules up from the depths with an apparatus that resembles a huge-vacuum cleaner, and it will have unknown environmental impacts.

For a while growth will continue: increasing amounts of more expensive energy will be used to mine and process poorer grade ores. But we are approaching a fundamental discontinuity in the types of ores available. When traditional ores are exhausted and silicate minerals must be broken down to obtain scarce metals, between 100 and 1,000 times more energy will be required. It is exceedingly doubtful that much metal will be produced in this fashion. The cost will simply be unbearable once the energy requirements grow that high. At that point, society will probably choose to substitute more abundant metal for the more scarce ones—even if this means inferior products, and lower efficiencies.

Historically, a combination of technological advances and cheap energy expanded the reserves of most metals by pushing back the grade of ore that can be mined and processed economically. While there is still room for technological advance, energy has become an ever-tightening constraint. For a while growth will continue: increasing amounts of more expensive energy will be used to mine and process poorer grade ores. But we are approaching a fundamental discontinuity in the types of ores available. When traditional ores are exhausted and silicate minerals must be broken down to obtain scarce metals, between 100 and 1,000 times more energy will be required. It is exceedingly doubtful that much metal will be produced in this fashion. The cost will simply be unbearable once the energy requirements grow that high. At that point, society will probably choose to substitute more abundant metals for the more scarce ones—even if this means inferior products, and lower efficiencies.

Even in the unlikely event that some unexpected development makes available such vast amounts of cheap energy that silicate minerals can be mined for scarce metals, the substitution of common metals is still likely to take place. Common metals are far more abundant in rock than are the scarce metals, and in mining for scarce metals vast amounts of common ores will be produced. Rather than accumulating an ever-increasing surplus, it seems reasonable to assume that society will find ways to use the metals produced. Economic literature is often very glib about the ease of resource substitution. But the desultory results of most recent efforts to substitute other fuels for oil indicate that, even where the need is clear and substitutes are available, the process of change can be slow and painful.

A. G. Chynoweth, materials research director at Bell Laboratories, believes that, as a general rule, "the simpler the application, the easier it is to find a substitute material. If a society's needs are sufficiently simple, the thesis of infinite substitutability might be tenable—materials are likely always to be available for simple products such as utensils for cooking and eating, for clothing, and for simple dwelling structures. But the more a society depends on complex and sophisticated equipment, the more vulnerable it is to scarcities of certain key materials, even if these are used in very modest amounts". To support this point, Chynoweth notes that in the home or office telephone "42 of the 92 elements provided by nature are present as constituents of 35 types of metals and alloys, 14 types of plastic, 12 varieties of adhesives, and 20 different semi-conductor devices".

Some resources are in sufficiently short supply that their primary production is unlikely to contribute much in the not-too-distant future. Oil and natural gas are examples, as are helium, antimony, gold, and molybdenum. For most minerals, however, the most immediate danger is not an absolute global shortage but a supply that is constrained by political, energy, and environmental limits.

Other OPECs?: Mineral resources are distributed unevenly. A disproportionate share of the world's most important industrial materials is drawn from southern Africa, East Asia, the Soviet Union, and the western portion of the Americas. Most scholarly work on mineral availability has focused on geological constraints under various economic assumptions. But the single most important lesson of the oil cartel is that political constraints can come first.

Cartels are not a new phenomenon in the field of mineral production. What is new is the growing interest of governments with nationalised firms in the establishment of such collusive associations. Over the last few years, producers' associations have been formed for copper, bauxite, iron, mercury, and tungsten.

The 11 members of the International Bauxite Association control 75 per cent of all production—a higher fraction than that of world oil production controlled by the Organisation of Petroleum Exporting Countries (OPEC). In 1974 Jamaica increased its bauxite taxes more than five-fold. All other major bauxite producers in the International Bauxite Association, except Australia, followed suit. Between late 1973 and mid-1974, the price of Moroccan phosphate quadrupled in a series of increases imposed by the Moroccan phosphate monopoly. Increases by other major producers, including the United States, followed quickly. The prospects for successful mineral cartels vary from commodity to commodity, depending upon the fraction of the world's resource base controlled by the cartel members, the extent of the fall in demand for the commodity as the price rises, the amount of the commodity produced outside the cartel when the price rises, and the cohesiveness of the commodity association.

Distribution of Production and Reserves of Major Minerals

Mineral	World Production (Per cent)	World Reserves (Per cent)	Countries
Bauxite	64	62	Australia, Jamaica, Guinea, Surinam
Chromium*	70	96	Soviet Union, South Africa, Rhodesia, Philippines
Cobalt**	90	64	Zaire, Zambia, Canada, Morocco
Copper	53	57	US, Chile, Canada, USSR
Gold**	84	88	South Africa, Canada, US, Australia
Iron Ore	55	61	USSR, Australia, US, Brazil
Lead**	59	77	US, Australia, Canada, Mexico
Manganese**	78	95	South Africa, Gabon, Brazil, Australia
Mercury	65	65	Spain, USSR, China, Italy
Molybdenum**	99	98	US, Canada, Chile, Peru
Nickel	63	65	Canada, New Caledonia*
Phosphate Rock**	81	88	US, Morocco, Sahara, Tunisia
Platinum group	99	99	South Africa, USSR, Canada
Potash**	90	95	Canada, West Germany, US, France
Silver	53	60	Peru, Mexico, Canada, US
Tin	65	48	Malaysia, USSR, Indonesia, Bolivia
Vanadium*	85	96	South Africa, US, USSR, Chile
Zinc	43	57	Canada, Australia, United States, Peru

*Figures are based on 1974 data
**Calculated for non-communist countries only.

Source : US Bureau of Mines.

For many important minerals, the major sources of production are concentrated in a rather small number of hands (see table). The current level of concentration implies that a very large number of minerals are vulnerable under this criterion for a successful cartel.

Energy and Environmental Constraints: More than one-fifth of the total US energy budget is now spent on materials production, and that fraction is rising. The mounting cost of energy and the environmental damage connected with energy and materials production are of increasing concern.

The primary metals industry uses about eight per cent of total energy consumed in the United States. Of this, about two-thirds is used for iron and steel production and about one-fifth for aluminium. The plastics industry, which remains one of the fastest growing industrial sectors in most western countries, uses oil as its feedstock. In the United States, more energy is embodied in plastics than is used for producing aluminium. Unlike refined metal, however, the energy invested in plastics is generally only recoverable through combustion. In a society where recycling was the rule rather than the exception, the energy initially invested in refining aluminium might be properly perceived as an energy investment for the future. Only five per cent as much energy is required to recycle aluminium as to refine bauxite ore.

The amount of energy required to produce one unit of a basic material from virgin ore can be compared with the amount required to produce recycled materials from scrap. The recycling of aluminium, copper, and polyethelene plastic can save large amounts of energy, while the recycling of glass and newsprint can save smaller amounts.

By producing raw steel from scrap, the steel industry avoids using energy to mine and transport iron ore, coal, and limestone, as well as to produce iron in a blast furnace. In the case of glass production, with only one melting step and no energy-consuming chemical reactions involved, the energy-saving potential from reuse of scrap glass is considerably less.

Vast differences exist in the amounts of energy needed to process various virgin ores, but the range of energy requirements for recycling used materials is much narrower. Sometimes energy relationships are even reversed at the recycling state. For example, 17 times as much energy is needed to refine one pound of aluminium as to manufacture one pound of glass, but almost 50 per cent more energy is needed to recycle one pound of glass than to recycle one pound of aluminium. On the other hand, aluminium containers can currently be used only once before being recycled whereas returnable glass bottles can be reused several times at great energy savings.

There is a happy coincidence between conserving energy and making efficient use of material resources. The current wasteful materials policies could only have evolved in an era of cheap, abundant energy. We have been living off our energy "capital" for the last century (sunlight stored in the form of fossil fuels); we must soon begin living off just our "income" (using sunlight directly). Now that the end of the petroleum era is in sight, fundamental shifts in materials policies will necessarily follow. Even as energy provides a constraint on mineral extraction, a scarcity of materials would limit our future capacity to harness energy. The dependency is mutual.

Between Mine and Dump: Most materials flow directly from their natural source (a mine, forest, or crop) to a processing plant, to a manufacturing industry, to a consumer, and lastly to the dump. At several points along this path, materials can be recycled. It is common, for example, for primary processing industries to immediately recycle the "home scrap" produced inside their own facilities and also the "prompt industrial scrap" produced by manufacturing industries.

After a manufactured commodity has gone through its expected lifetime, it can often be repaired. This includes such actions as overhauling automobiles, recapping tyres, mending clothing, and renovating buildings. A second way to stretch the lifetime of materials is through the direct reuse of material goods without changing their form. Packaging, refillable bottles, and shipping pellets can be immediately reused; functionally adequate, if stylistically dated, automobiles can be resold. For goods clearly at the end of their usefulness, complete recycling is generally possible. There are large social and economic advantages to segregating them by component materials as close to the point of end-use as possible for easy recycling. For example, many neighbourhoods, apartment buildings and commercial establishments provide for the periodic pickup of newspapers and other paper products. Many communities have established recycling centres where paper, beverage containers, and waste oil can be deposited. In a couple of instances—notably, aluminium cans and automobile lubricating oil—the industries themselves have participated in the establishment of recycling centres for segregated products.

Resources can also be recovered at centeralised facilities designed to recycle mixed urban wastes. This approach requires the least effort on the part of the individual consumer, but it places vastly greater economic, energy, and environmental demands upon the recycling technology. Moreover, due to the frequent contamination of one set of desired materials by another, mixed-waste systems hold lower potential for a complete recovery of

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high-grade materials than do other systems.

There are thus three basic components of a sustainable resource policy: waste reduction, with an emphasis upon smaller, simpler, easily repaired, more durable products; waste separation, which requires consumers to segregate useful constituents of the wastes instead of mixing them together; and waste recovery, which consists of high technology, centralised facilities to resegregate mixed wastes into their useful components. Each would deserve a more careful examination, if space permitted.

As a general rule, "the simpler the application, the easier it is to find a substitute material. If a society's needs are sufficiently simple, the thesis of infinite substitutability might be tenable—materials are likely always to be available for simple products such as utensils for cooking and eating, for clothing, and for simple dwelling structures. But the more a society depends on complex and sophisticated equipment, the more vulnerable it is to scarcities of certain key materials, even if these are used in very modest amounts."

Making the Most of What We Have: The intellectual case for materials conservation is powerful, and the needed technology is not terribly sophisticated. The missing ingredients are a broad social commitment to this goal and the implementation of specific policies to achieve it. A large number of specific policies have been suggested, and a few have been enacted in various places.

A most important additional role for government at all levels would be to facilitate and stabilise markets for secondary materials, perhaps by providing price supports or even by becoming the purchaser of last resort. An increase in the product charges on virgin ore might also be necessary when the price drops due to ordinary market fluctuations.

An intelligent starting point would be the elimination of the discriminatory taxes and regulations that currently place secondary materials in an uncompetitive position. Depletion allowances, for example, constitute an outright subsidy designed to encourage the consumption of virgin materials. In the United States railroad rates are lower for ores than for secondary materials,Moreover, waste disposal costs are not generally felt directly by the consumer, and they frequently do not include all environmental costs. The policies that were enacted in a period of bountiful resources deserve a comprehensive reexamination today.

Perhaps the most highly publicised scheme to combat solid waste deals with one of the most visible waste products—the beverage container. Some analysts favour deposits on bottles and cans, while others would ban non-refillable containers altogether. Sweden and Norway have taxation and deposit programmes for beverage containers. Denmark prohibits the use of non-returnable soft drink containers and is studying the concept of requiring a standard-size bottle for many different liquids. Such an easily reused bottle is already marketed in Denmark for wines.

An analysis by the US Environmental Protection Agency of proposed national returnable-bottle legislation found that a successful programme would reduce roadside beverage container litter by 60 to 70 per cent by 1980, and would save 500,000 tons of aluminium, 1.5 million tons of steel, and 5.2 million tons of glass each year. It would also save the energy-equivalent of 125,000 barrels of oil per day and require no more capital investment than a one-way container system would. The programme would produce 165,000 jobs while eliminating 80,000 jobs (of which normal attrition would account for 40,000, in any case). And the use of returnable beverage containers would save consumers $2.5 thousand million annually by 1980, rising to savings of $3.2 thousand million a year by 1985.

In addition to mandatory deposits for beverage containers, such deposits have been proposed for automobiles, tyres, electrical machinery, and consumer durables. In Sweden everyone who has purchased a car since 1976 has had to pay a deposit of 54 dollars; when the car is scrapped, the owner receives a refund of 65 dollars. The average life expectancy of a Swedish car is about nine years. When the car is returned to a certified scrap yard, the owner receives a certificate, which must in turn, be shown to the relevant ministry in order to "deregister" the automobile. In lieu of such deregistration, the owner is presumed to maintain ownership of the vehicle, and must continue paying annual registration taxes on it in perpetuity.

Another common proposal is that all products be charged a flat tax based upon the amount of virgin material they contain. The tax could be based on the cost to society of toxic emissions and other pollutants, land loss, resource depletion and the disposal of the material after use. A study by the Research Triangle Institute concluded that the 18 to 20 per cent of US paper currently recycled could be doubled to reach the percentage recycled during

World War-II by 1985, if a 25 dollar-per-ton product charge were introduced gradually. The net social benefits were calculated at one thousand million dollars for a ten-year period. Similar charges could be levied for all the principal sources of waste.

A most important additional role for government at all levels would be to facilitate and stabilise markets for secondary materials, perhaps by providing price supports or even by becoming the purchaser of last resort. An increase in the product charges on virgin ore might also be necessary when the price drops due to ordinary market fluctuations. Building a stable market for secondary materials will doubtless be a long process, requring the generation of enthusiasm for recycled materials in the manufacturing sector and the creation of an infrastructure to handle the processing.

While some combination of taxes, incentives, and subsidies should provide a context within which a materials-conserving ethic would evolve, a major programme of public education will doubtless also be necessary. This is particularly true for life-style changes to reduce the volume of materials used, and for programmes to segregate household wastes at the point of origin. Cooperation in such programmes cannot simply be legislated; it requires broad public support.

There are three basic components of a sustainable resource policy: waste reduction, with an emphasis upon smaller, simpler, easily repaired, more durable products; waste separation, which requires consumers to segregate useful constituents of the wastes instead of mixing them together; and waste recovery, which consists of high technology, centralised facilities to resegregate mixed wastes into their useful components. Each would deserve a more careful examination.

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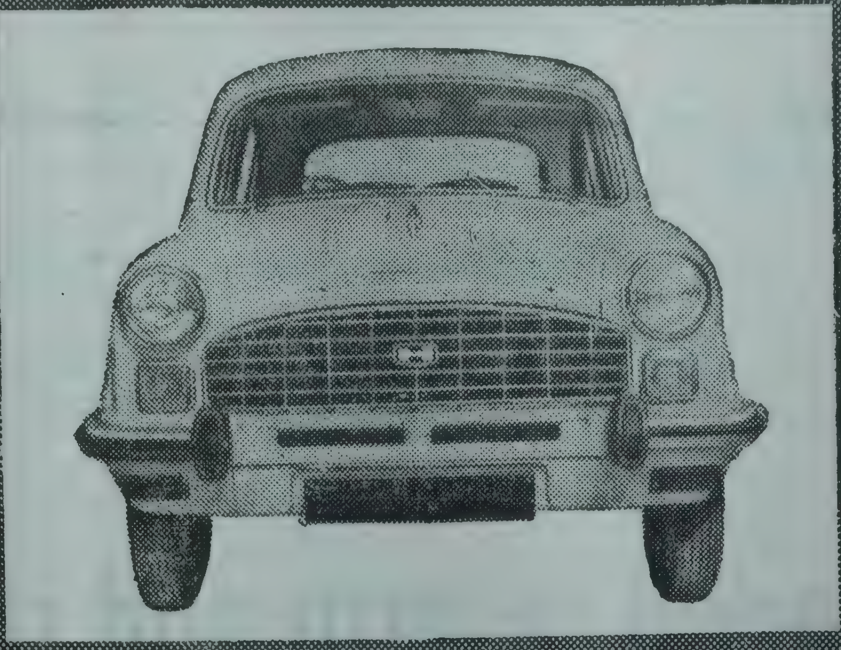
If source separation is to be truly successful in individual homes, modest design rearrangements might be necessary. Segregated places for cans, bottles, paper, and food scraps could handily take the place of the single garbage can. There will, of course, be some costs connected with these changes, but they are trifling when compared, for example, with the cost of indoor lavoratories and the connecting sewage systems—an expensive "waste-disposal technology" that was unheard of a century ago but is now almost universal in the industrial world. Twenty years from now, it may be as unusual to build a house without segregated waste receptacles as it would be now to build a house without indoor plumbing.

For commercial buildings and multi-family dwelling, the government may need to assist the establishment of recycling programmes. Today, for example, most local governments have policies requiring a certain amount of parking space per building. Considering the extraordinary advantages of source separation, it would be sensible for these same governments to set mandatory space requirements for on-site processing and storage of recyclable materials. Much of the contemporary world was built in an era when oil cost two dollar per barrel and most resources were plentiful. We are now approaching an era in which oil and several other resources will begin to grow scarce. This will necessarily prompt some changes in the way we do things, and perhaps some changes in the choice of things we do.

What would a sustainable world look like? Material well-being would almost certainly be indexed by the quality of the existing inventory of goods, rather than by the rate of physical turnover. Planned obsolescence would be eliminated. Excessive consumption and waste would become causes for embarrassment, rather than symbols of prestige.

The environment would be enhanced, and global population would be brought into balance with the planet's carrying capacity. All people would have a means of livelihood that yielded fair wages and did not deprive them of health or pride. Inflation would be brought under control, as the impact of resource scarcity was mitigated by the widespread use of durable products that could be recycled. Industries and energy sources would be decentralised and hence less vulnerable to acts of man and nature. Both ends of the material chain—the mine and the dump—would fade in importance compared with the improvement of the human condition from existing material stocks. Society would, at long last, apply its collective intellect and energy to the central task of an intelligent materials policy: making the most of what we already have.



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Point of view

Agrarian reform and rural development

Sudhir Sen New York

In this article, Sudhir Sen reviews the progress of land reforms in India and the deliberations of the FAO-sponsored World Conference on Agrarian Reform and Rural Development held in Rome in July last. He opines that the progress on this front till now has been very slow not only in India but also in many other countries. The deliberations of the Rome conference too are only marginally meaningful. The prospect is for another hectic round of beating about the bush on a global scale, with genuine land reform remaining as elusive as ever.

"TRANSFORMATION OF rural life in all its aspects," and "mobilisation of available economic and technological resources to eradicate proverty and malnutrition"—this is the goal before mankind. With this flamboyant declaration, the delegates of 145 countries, who attended the FAO sponsored World Conference on Agrarian Reform and Rural Development (WCARRD) concluded their eight-day session held in July last at the agency's headquarters in Rome.

The Director-General of FAO, Mr Edouard Saouma, extolled the conference result as an "important milestone". However long the march towards the abolition of poverty and hunger, he added in an exuberant mood, "We have conquered the first obstacles in our path. We can see the way ahead. If we persist, we can reach our goal".

These utterances clearly reflect an escalation of rhetoric. But they can hardly conceal the dismal record of the past. Why should FAO—and, for that matter the developing countries—take more than three decades just to "see the way ahead" and to conquer the "first obstacles"? How many more "milestones" will there be along this uphill journey? And what reason is there to assume that this time around we are going to "persist" until the goal is reached ? Indeed, the Plan of Action as adopted by WCARRD with ostentatious fanfare is itself a cause for misgivings. It is a questions-begging rather than a inspiring document, packed with too many items without attempt to weigh their relative importance and to sort out the priorities among them, and embellished with a spirinkling of familiar cliches that are more pertinent to the domain of dreams than of executive action. It seems custom-made to generate maximum motion in order to achieve minimal progress.

Where there is no will, there is a way ! Perhaps we need this reformulation of a hoary proverb to understand why the world has made so little headway on such a vital subject such as land reform which has been discussed incessantly, given obeisance universally, legislated upon super-abundantly and circumvented unconscionably.

The classic case of his massive evasion, one must sorrowfully admit, remains India. For half a century we had denounced the British rule for ruining our peasantry—for leaving them at the mercy of an exploitative class of landed interests it had artificially created and imposed on them, vociferously demanded redress of this grievance, and loudly proclaimed "land-to-the-tiller" as a supreme national goal to be realised at the crack of freedom's dawn. How fast and how completely attitudes changed after independence! The rhetoric about land reform continued as before, but more and more it took on a cosmetic quality. After a while, we quietly surrendered its substance and happily clung to its shell.

Tomes of new laws were passed by the state legislatures, but in most cases they added up only to voluminous tinkering with a stinking status quo. Ceilings were fixed high enough under the ceiling laws so as not to make much real inroads into the existing holdings. In addition, they were riddled with loopholes to give them a sieve-like quality and to make evasions reasonably easy.

Indeed, even the very concept of land reform underwent a bizarre kind of reform. The chain of revenue-collecting intermediaries, which had mushroomed in the heyday of British rule and had weighed heavily on the actual tillers with numerous extortionate practices, was abolished, mostly with payment of handsome compensations, and a "direct rela-

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THE GWALIOR RAYON SILK Mfg. (Wvg.) Co. Ltd.,

[Incorporated on 25th August, 1947 under Gwalior Companies Act
(I of Samvat 1963)]
Registered office: Birlagram, Nagda (M.P.) 456 331

Issue of 20,00,000 Equity Shares of Rs.10/- each for cash at a premium of Rs. 25/- per share to Existing Shareholders who are individuals, to Employees of the Company and to the Indian Public.

Persons interested in full details may obtain copies of Prospectus and Application Forms from the Registered Office of the Company and the Brokers, Bankers and Managers to the Issue mentioned below:

The Subscription List will open at the commencement of banking hours on Tuesday, the 25th September, 1979 and will close at the close of banking hours on Thursday, the 11th October, 1979 or earlier at the discretion of the Board of Directors of the Company but not earlier than the close of banking hours on Thursday, the 27th September, 1979.

Applications have been made to the Bombay, Calcutta, Delhi, Indore and Bangalore Stock Exchanges for permission to deal in, and for an official quotation of the proposed Equity Shares of the Company.

History and Main Objects of the Company:

The Company was registered on 25th August, 1947 in Gwalior under the Gwalior Companies Act (I of Samvat 1963) and in the course of time, set up its textile units at Gwalior (M.P.) and Bhiwani (Haryana), its Viscose Staple Fibre Units at Birlagram, Nagda (M.P.) and Mavoor (Kerala), Grasilene Fibre (High Performance Fibre) unit at Harihar (Karnataka), Rayon Grade Pulp Units at Mavoor (Kerala) and Harihar (Karnataka), paper unit at Mavoor (Kerala), Caustic Soda unit at Birlagram, Nagda (M.P.) and Rayon fibre, Pulp and allied Chemical Plants and Equipments Manufacturing unit at Engineering and Development Division at Birlagram, Nagda (M.P.). It has also the subsidiary company named Kerala Spinners Ltd., Alleppey (Kerala), manufacturing man-made fibre yarns.

The Company, by developing self-reliance in the manufacture of Rayon Grade Pulp and viscose staple fibre, as pioneers in the country, has not only substantially increased the availability of textile fibres in the country, but has also reduced the drain of valuable foreign exchange, saving about Rs. 220 crores on this account during the period of last about two and a half years alone.

The Company has been contributing substantial amounts to the Public Exchequer in the past and it contributed a total of approximately Rs. 33 crores by way of Income-tax, Excise-duty, Sales-tax etc, during the year 1978-79 alone to the Government Exchequer, which speaks volumes for the Company's substantial mite towards the Country's economic growth.

JOINT VENTURES ABROAD:

The Company has already set up joint ventures for production of Viscose Staple fibre in Thailand and another in Philippines for production of Man Made fibre and Synthetic fibre yarn. Necessary permission has also been received recently by the Company for setting up joint venture project for the manufacture of Carbon Black in Thailand. The Company is also exploring possibilities in Philippines for establishing a big chemical complex to produce Rayon Grade Pulp and cellulosic fibre which will open further avenues for export of plant and machinery.

PROPOSED NEW ENTERPRISE:

The Company's Application for issue of Industrial Licence for the manufacture of eight lac tonnes per annum of Portland Cement at Jawad (M.P.) is under Government's consideration.

MANAGEMENT:

The Company is managed by its Board of Directors, and subject to the superintendence, control and direction of the Board, the day to day management of the Company is carried out, in consultation with the Company's Adviser, by the Senior Executives of the various divisions of the Company assisted by other professionally trained and experienced technical, commercial and supervisory personnel at various levels.

THIS NEW ISSUE

The Government of India, Department of Company Affairs while conveying its approval to the Company's aforesaid Polynosic type High Performance Fibre Project by its Order dated 28th August, 1977, inter alia, stipulated that the Company should within the time allowed thereby, (which has been extended from time to time) issue fresh Equity Capital of the face value of Rs. 2,00,00,000/- (Rupees two crores) to the Indian Public, excluding the Birla Group. The Deputy Controller of Capital Issues has, by Order No. R-83 CCI/79-1725 dated 19th May, 1979, as modified by a further Order dated 6th July, 1979 conveyed to the Company the consent of the Central Government to the proposed issue of 20,00,000 Equity Shares of Rs. 10/- each at a premium of Rs. 25/- per share in the manner mentioned hereunder.

SHARE CAPITAL:		Nominal Value (Rs.)
Authorised:		
2,00,00,000	Equity Shares of Rs. 10/- each	20,00,00,000
1,50,000	9.3% (subject to deduction of tax) Redeemable Cumulative Preference Shares of Series 'A' of Rs. 100/- each.	1,50,00,000
1,00,000	8.57% (subject to deduction of tax) Redeemable Cumulative Preference Shares of Series 'B' of Rs. 100/- each.	1,00,00,000
3,00,000	9.3% (subject to deduction of tax) Redeemable Cumulative Preference Shares of Series 'C' of Rs. 100/- each.	3,00,00,000
		25,50,00,000
Issued, Subscribed and Paid up:		
1,58,40,000	Equity Shares of Rs. 10/- each fully paid.	15,84,00,000
1,48,275	9.3% (subject to deduction of tax) Redeemable Cumulative Preference Shares of Series 'A' of Rs. 100/- each fully paid.	1,48,27,500
2,00,000	9.3% (subject to deduction of tax) Redeemable Cumulative Preference Shares of Series 'C' of Rs. 100/- each fully paid.	2,00,00,000
		19,32,27,500
PRESENT ISSUE:		
20,00,000	Equity Shares of Rs. 10/- each at a premium of Rs. 25/- per share	2,00,00,000
Out of the present issue:		
a) 1,00,000	Equity Shares of Rs. 10/- each at a premium of Rs. 25/- per share have been reserved for subscription by the employees of the Company, subject to the condition that allotment per individual employee shall not exceed 200 shares and that these shares shall not be transferable for a period of two years from the date these shares are made fully paid up.	10,00,000

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TERMS OF PAYMENT:
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e or Brokers or from the Company at its Registered Office. The amount payable shall be as follows:

On application Rs. 17.50 per share On allotment Rs. 17.50 per share.	Consisting in each case of Rs. 5.00 on capital account and Rs. 12.50 on premium account.

Failure to pay the amount due on allotment will render the shares (including amount already paid on them) liable to forfeiture.

The Application Form properly completed must be lodged together with the amount payable on application with any of the Bankers to the Issue named below or at any of their offices mentioned against their names in the Application Form. The instructions contained in the Application Form and those stipulated by the Controller of Capital Issues are an integral part of the conditions of this Offer and must be carefully followed. Otherwise the application is liable to be rejected.

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tionship" was established between the state and the rent-paying landowners. This was now cheerfully labelled as land reform. Yet, in almost all cases, it stopped short of conferring ownership on the tillers. It was, in essence, not land reform, but *land revenue* reform.

Soon attention shifted to the elaborate exercise of collecting the land held in excess over the prescribed ceilings; and in two decades all the state governments, taken together, managed to pool four million acres. Then began another long-drawn out exercise, namely, to distribute this excess land among the landless rural families. And this is what, for quite some time now, has been treated as the be-all and end-all of India's land reform programme ! The excess land so far collected represents just over one per cent of India's arable land, and it mostly consists of poor land of marginal quality. Yet, this is the tiny acreage we are now preoccupied with while ignoring what happens to the other 99 per cent. The tail is now wagging the elephant ! And we are concentrating on it so intensely as if it were the whole animal.

perverted ideal

Thanks to our uncanny national genius, the "land-to-the-tiller" ideal has been successfully perverted into a gratuitous one of "land-to-the-landless". That this stands our earlier ideal on its head is something that no longer troubles our conscience nor disturbs our equanimity. After accomplishing this remarkable volte-face, we are not, surprisingly, having some second thoughts about the second motto. What economic sense would it make to give land to the landless when they lack both experience and resources, and are unlikely to qualify for credit ? Would it not be better to scarp this idea, as is now being increasingly suggested ? Such a step will certainly spell no national calamity. At best, it will involve some loss of face, but no economic loss, while, on the plas side it will end a hypocrisy we have been perpetrating in the name of land reform.

Meanwhile, the urgency of a land-to-the-tiller programme as originally advocated has grown enormously with time. The reasons should be crystal clear, but since they continue to be blithely ignored even now, it is worth restating them, even if very briefly. First, there is the tremendous growth of population. India's 350 million acres of arable land had to support about 350 million people at the time of independence. Today the same acreage must support 650 million, and by 2000 AD probably close to a billion people. Every acre land must, therefore, be worked very much harder to maximise output.

population upsurge

Second, with the upsurge in population, the work force has been exploding, especially in rural areas. This means farming must be labour-intensive with very selective use of light machinery to improve productivity, ease seasonal bottlenecks, and reduce drudgery, but not to displace labour.

And third, small farms of five acres or less, can be definitely viable as a productive unit in Indian conditions. The climate is a tremendous asset. Crops grow fast in the tropics and sub-tropics; and where water supply is assured, they can be grown round the year. Even in rainefed areas, both cropping intensity and yield per crop can be significantly raised, especially with short-duration high-yielding varieties. Yield and income per acre can be further boosted with mixed farming. In most areas cultivation of heavy-yielding crops—tubers, vegetables, fruits—and animal husbandry, poultry and pond fishery offer vast potential.

Agriculture based on small family holdings, it may be presumed, will increasingly put on the characteristics of gardening, or horticulture, the pattern, that has evolved in Japan, Taiwan and South Korea; and, in a revealing fashion, also in Soviet Russia and communist China, albeit on the small private plots allotted to the collective, state and commune farm workers. This gardening-type cultivation, of India's "agricultural plant", from turning out enough food and fibre to support her burgeoning population on a decent standard of living, will have all round multiplier effects. It will give an unprecedented impetus to her GNP growth and will rapidly multiply job opportunities that are so desperately needed today.

Here, then, are three inescapable conclusions that stare us in the face, First, given the tools of modern science, small farmers can prosper. Second, given the size of the population, a country like India can flourish only with small farms. This holds good for Bangladesh, Pakistan, Sri Lanka and a good many other countries.

But, third, a vibrant, forward-looking, gardening-type agriculture can never be developed as long as it continues to be crowded with tenants-at-will and share-croppers-at-all, as is overwhelmingly the case in India even today. The dream of a vigorous. science-based agriculture can be realised in India only when they are fully liberated from their present semi-serf status and turned into self-reliant owner-farmers. Half a century ago India's political leaders treated this as an axiomatic truth and as the meaning—the only legitimate meaning—of land reform. How long shall we continue to turn our back on it, tolerate the mounting chaos in the countryside, pay a staggering price for this perversity, and make a mockery of the freedom we won at great sacrifice to mould our economic destiny ?

India's misfortune

To our misfortune, the default of India and other developing countries has been fully matched, even reinforced, by the policies pursued under the international aid programmes. The United States, for example, was the foremost champion of land reform in the non-western world in the 1940's. Its support bore the first spectacular fruits in Japan. The role played by General MacArthur as Supreme Commander was crucial, though it is often exaggerated. He did not bully or bulldoze the nation into land reform. What he did was to lend unstinted support to the progressive land reform movement which had been afoot for sometime, but was unable to make significant headway in the teeth of opposition from the landowning class. It is to the credit of the general that, for whatever reason, he cast the weight of his authority on the side of the progressive forces which finally carried the day.

Wolf Ladejinsky, a life-long crusader for land reform, who was well-known in India especially as the World Bank representative in New Delhi in his later years, sheds some interesting light on the progress of land reform—and its abrupt halt—in his writings posthumously published by the Bank. After the highly successful land reform in Japan and South Korea, for which he had himself played an active role, General MacArthur wanted similar reforms to be carried out in both mainland China and Formosa. The Joint Commission on Rural Reconstruction (JCRR), which was set up in 1948 under the China Aid Act, made a promising start, but its work was short-lived. Soon the Communist armies swept through China, JCRR moved its headquarters first from Nanking to Canton and then to Formosa. Within a year all its work on the mainland was suspended and carried over to the island.

farmers' response

Yet Ladejinsky was ecstatic about his brief experience in China, especially about the farmers' response he encountered in Szechwan to the JCRR programme which was spearheaded by land reform to confer ownership of land, or at least security of tenancy, on the peasants. And so when president Truman announced his Point IV programme (January 20, 1949), he made out an unanswerable case to adopt the JCRR approach as the model, in any case for the densely-populated countries of Asia. With land reform as its centrepiece, it would, he insisted, make the quickest impact on the material well-being of the poor peasants; it would do so with a minimum amount of aid dollars; and it would, as a bonus, also wean them from the lure of totalitarian ideologies. But his pleadings were of no avail. The proposal was promptly vetoed. And the technical assistance programme took off on an entirely different orbit.

The Point IV programme synchronised with—even if it was not inspired by—the outbreak of the cold war. In any case, before long it was, at least de facto subordinated to the exigencies, real or fancied, of the latter. As the world slid into the Dulles era of "containment policy" and ideological bloc-building, the word reform was erased from the contemporary vocabulary; it was time to hold the line rigidly and mindlessly. And so, while singing the glories of democracy, America diligently collected a galaxy of dictators as its allies, extending from South Korea along the huge arc to Morocco. The only country it could not be friendly with happened to be Jawaharlal Nehru's democratic India !

From alliance with the right-wing dictatorial regimes it was but a shout short of an implicit alliance with the powerful landed interests. As a result, the land reform movement ground to a halt, and the feudal status quo was frozen indefinitely. The reforms already carried out in Japan, South Korea and Taiwan laid the foundations for their booming post-war economies. They are a monument to the imaginative leadership the United States displayed for a tantalisingly brief span of a few years, just as the precipitate about-turn and the monumental default that followed have earned it a standing rebuke from history.

In this cold-war climate the United Nations family obligingly bowed to the *Zeitgeist*. FAO and UN, for example, have for years routinely talked about land reform, dutifully published biennial studies on "progress" in this field and elaborately reported why, in substantive terms, the record looked so bleak, putting the blame invariably on a handy abstraction called lack of political will in the developing countries, and absolving themselves implicitly of any responsibility for the outcome. That such dedication to a passive role did not befit prestigious international bodies set up to promote world development is something that never seemed to cause them much sleeplessness.

A unique characteristic of the WCARRD programme of action, acording to Mr Saouma, is the agreement about countries setting up "specific targets" for themselves, establishing "benchmarks", making progress reports, and authorising FAO and other UN bodies to help them with the necessary methodology and monitoring and evaluating progress, both at the national and international levels. This new approach to such global problems, he believes, is "an outstanding development".

Yet, it does not call for any prophetic quality to predict that the new action programme will lead to a sizable expansion of the bureaucratic apparatus without making a dent in the real problem. For one thing, it has blithely consigned the land-to-the-tiller idea to the periphery, although the litmus test of land reform lies in turning tenants and sharecroppers into owner-cultivators. In addition, the programme has been loaded with a large number of items which, however desirable in themselves, can only result in diffusion of effort at the expense of the primary objective. With so much extra baggage, the going is bound to be agonisingly slow and, at best, only marginally meaningful. Clearly, the prospect before us is for another hectic round of beating about the bush on a global scale, with genuine land reform remaining as elusive as ever.

Eastern Economist 30 Years Ago

SEPTEMBER 23, 1949

After much earnest calculation, the Government of India completed two weeks ago a Foreign Exchange Budget, the purpose of which was to secure that, with current Sterling Balances releases, India had no adverse balance of payments. There is some melancholy food for thought in the timing of this event and the coming of devaluation. History has not worked very much on our side, and it seems not a little ironic that a foreign exchange budget should need to be revised even before it has been placed into operation. That has, in fact, been the case and the extent of this revision is not, as has been sought to be conveyed, either temporary or very small. OGL XVI which was the offspring of the new foreign exchange budget has only had a fortnight to live, and there are some factors in our import and export programmes which will need to have at least six months to run their course before a firm opinion can be expressed on our new blance of payments. But there is no reason to suppose that the gap in our payments is not significant enough to require immediate further corrective action.

India's Nepal policy in the seventies

B. C. Upreti

India's relations with Nepal are of crucial importance for various reasons—political, social and economic. This article by B.C. Upreti dwells at some length upon the course these relations have taken since the turn of the current century. The author has expressed the view that in the recent times India's conscious efforts have been to adopt the policy of non-interference in the domestic affairs of Nepal and strengthen economic relations with a view to assisting Nepal's development. India has started putting greater reliance on economic development of this Himalayan Kingdom in order to realise its strategic interests there.

THE FOREIGN policy of a country is not based on the whims of its political leaders; it is shaped by a number of factors. India's policy towards Nepal therefore, is determined by the necessities imposed on it by geography, history, socio-cultural background, economic interests, ideological proclivities, etc.

Geographically, Nepal occupies an important position in the Himalayas. Situated on the southern slopes of the Himalayas, strategically, it is of crucial importance in India's defence perameter.[1] The Indo-Nepalese borders are open and there is hardly any natural barrier between the two. In the north, Nepal's border is contiguous with the Chinese border containing difficult terrain. However, there are several passes breaching the Himalayas such as the Nara pass, the Kuti pass, the Kodari pass, etc, through which trade had been maintained in the past with Tibet. Moreover. The technological advancement has reduced the importance of geography to some extent. Therefore, if Nepal falls under the influence of any unfriendly power, say China, the entire Gangetic plain would be exposed. Also the main industrial and agricultural belt of India is not very far from Nepal. Thus, India has vital strategic interests in this Himalayan kingdom.

From the economic point of view, Nepal is important for certain reasons. More than 90 per cent of Nepal's trade is with India. A large part of the northern rivers system of India has its origin in Nepal. India can utilise these rivers for the purpose of power generation, irrigation and flood control with the active cooperation of Nepal. The socio-cultural composition in the Himalayas has also been a stable factor in India's policy towards Nepal. Mostly Indians and the Nepalese belong to the same cultural stock. More than 80 per cent of the Nepalese population is Hindu, which has close cultural links with its Indian counterpart. However, there are a few small cultural groups of Tibeto-Mongloid origin in the north and they have closer affinity with the Tibeto-Chinese culture. There is always the fear that China may exploit these groups for anti-Indian propaganda.

During the British period, considerable importance was accorded to the Himalayas in India's geo-political strategy. The primary objective of the British government was to build up a viable defence system in the north against the expansionist policy of Russia. However, after the Simla conference in 1913, China claimed suzerainty over Tibet and did not accept any compromise over it.[2] The British government, fearing that Chinese presence in Tibet would have its repercussions in the other Himalayan states, considered it vital to consolidate its position vis-a-vis other Himalayan states. and British India signed a treaty with Nepal on December 1, 1923. Since that date, Nepal remained a part of the British defence system for all practical purposes, though it enjoyed independence in its internal affairs.

However, the emergence of China as a major power in the late 1940s altered the situation in the Himalayas. China's successful control over Tibet gravely exposed the Himalayas and India's concern on the other Himalayan kingdoms became more vital. Nehru rightly observed that "India's interest in Nepal has become still more acute and personal because of the developments across our border, to be frank, especially, those in China and Tibet."[3]

India's political orientation towards Nepal had also played and important role in determining its policy towards that country. India's main concern was that political stability in Nepal was essential for India's own security. However, India felt that political stability could be brought about in Nepal with the establishment of democratic institutions. In order to achieve this objective India adopted a 'middle way' policy, which aimed at establishing democratic political order in Nepal but at the snme time not totally up-rooting the ancient order. Rather, it was a policy of 'gradual transformation'. India's policy of stability through democracy got a setback with the 1960 royal takeover—and India had to compromise with the monarchy for political stability in Nepal.

special relationship

Keeping in view its politico-strategic interests in the kingdom, India also adopted a policy of "special relationship" with Nepal on the assumption that 'no other country can have so intimate relations with Nepal as India can have."[4] The theory of "speeial relationship" was being criticised after the mid-1950s when King Mahendra came to power. He tried to give a new direction to the Nepalese foreign policy. Efforts were made to establish Nepal's relation with other countries, for instance, China and Russia, and thereby to reduce Nepal's dependence on India. In the 1960s India's special relationships with Nepal were undea severe strain. There were many ups and downs in the Indo-Nepalese relations since the royal coup of 1960. Nepal showed enough reluctance to accept the special relations to the extent that towards the end of the 1960s, demands came to be raised for the revision of 1950 Indo-Nepalese peace and friendship treaty. However, in the 1970s regional environment had entirely changed and it was considered essential by both the countries to reshape their foreign relations according to the changing regional balance of power.

The beginning of the 1970s marked certain cataclysmic changes in the south-Asian region. Bangladesh emerged as an independent nation after the 1971 Indo-Pakistan comflict. The old and united Pakistan no more remained a balancing power against India, and consequently India emerged as a major power in the sub-continent.

shift in policy

These developments also underlined a shift in India's foreign policy. India now considered it essential to improve its relations with the neighbouring countries on a "bilateral" basis, and also tried to keep super powers out in its dialogues with the neighbouring countries.[5] In fact in a way, India was trying to dilute its foreign policy objectives from super powers.[6] It seems that India's main thrust in its foreign policy of the 1970s is to rely more on the neighbouring countries, both for security and development through regional cooperation.

In order to improve its relations with Nepal on a bilateral basis, India has put greater emphasis on diplomatic visits of political leaders and talks of higher official and delegations. During these diplomatic visits the government of India has constantly made it clear that it does not have any intention of interfering in the Nepalese affairs, that no one would be allowed to indulge in anti-Nepal activities from the Indian soil, and that a durable basis would be searched for peace and friendship with Nepal. It has been a common understanding that because of geographical situation there are bound to be certain differences between the two countries. But joint efforts can be made to resovle them. The Nepalese response has been quite favourable. However, while Nepal is trying to improve its relations with India, it is also conscious of its relations with China. It has been contended by the Nepalese leaders that "though Nepal was following a policy of equi-distance with New Delhi and Peking, there was a definite tilt towards India."[7]

At times, India had to adopt a tough attitude towards Nepal. India showed its dissatisfaction over Nepal government's anti-Indian policy on Sikkim's association with India by delaying sending of its ambassador to Nepal. Afterwards, the Nepalese Foreign Affairs minister and prime minister visited India to clear the misunderstanding and misgiving. No anti-Indian statements have been heard in Nepal's official circles thereafter. India did not accept the Nepalese proposal for "zone of peace" because of its strategic stake in the kingdom, though this idea was appreciated by China, Russia and Pakistan. In October, 1976, the government of India also decided to restrict the entry of Nepalese in the five districts of north-west Bengal, two northern districts of UP, Sikkim's areas adjacent to Bhutan and northern states. It was stated that Nepalese would be allowed in these areas for 15 days only with the permission of the government of India for which they will have to apply to New Delhi through the Indian embassy in Kathmandu. This policy was widely criticised in Nepal with the apprehension that such a policy would be harmful to those Nepalese who came to India daily for their livelihood. In order to remove these doubts. India's Foreign Secretary visited Nepal and made it clear that the permit system was introduced for security reasons. Later on, this policy was liberalised and it was stated that the permission letters would be issued by the district magistrate of the area concerned.

exchange visits

The Janata government also laid great emphasis on diplomatic visits in its efforts at strengthening relations with Nepal. In fact, the frequency of the visits of Indian political leaders to Nepal became greater. One would agree with the view that the visits of India's Foreign minister to Nepal, twice—in July 1977 and September 1978 and prime minister's visit in December, 1977, contributed a great deal in clearing the misunderstanding created, especially owing to the Indian press criticism of Nepalese affairs. The Indian press criticism of the arrest of Mr B.P. Koirala and Mr Ganesh Man Singh was viewed by the Nepalese leaders as a "hate campaign" policy towads Nepal.[8] However, Mr A.B. Vajpayee made it clear that Indian press had the democratic right of criticising whatever it observes unfair, even, the Indian prime minister. This statement was, indeed, helpful in clearing off the dust.

The government of India also showed a sympathetic attitude towards Nepal's "zone of peace" proposal, though it emphasised that the whole subcontinent should be made to zone of peace.[9]

It seems, that in the recent times, India's conscious efforts have been to adopt the policy of 'non-interference' in the domestic affairs of Nepal.

non-interference

In this respect, the Janata government tried to follow the policy of not interfering in the internal affairs of the neighbouring countries. This is evident from the fact that the government of India neither favoured nor criticised the political developments taking place in Nepal since the outbreak of the students agitation. However, it does not mean that India has tied up its relations with the leaders of the outlawed political parties : rather, relations were also maintained with them at the party level.[10] This suggests that the Janata government has tried to maintain its relations with Nepal at two levels. Some of the Janata party leaders, because of their close contacts with the Nepalese Congress leaders, could not restrain the temptation of criticising the king's policy against the progressive forces. The Indian government, however, did not react to the events taking place in Nepal, especially since Mr B. P. Koirala's return to Nepal in 1976. This seems to be the correct policy towards durable peace and friendship with Nepal. Of late,nothing has been heard regarding the theory of "special relationships" in India's Nepal policy.

The economic relationship is also an important aspect of India's Nepal policy. Nearly 90 per cent of Nepal's trade is with India and its overseas trade also flows through India. In the matters of trade, Nepal's long standing demand had been that India should provide transit facilities to Nepal under a separate transit treaty. This issue had often created strains between the two countries. The transit problem has now been overcome with the conclusion of separate treaties on trade and transit in March, 1978."[11] This may be regarded as an important step towards the development of bilateral relations between India and Nepal. Under the transit treaty, India had provided 15 transit routes and other facilities to Nepal.

India's economic and technological assistance to Nepal has also increased in the recent years. India's main objectives behind its aid policy towads Nepal have been politico-strategic and economic. It is felt that economic development is essential for democracy and stability, which, in turn, is essential for India's security. Moreover, with the Nepalese cooperation, India can undertake aid programmes for mutual benefit. India started providing economic and technological assistance to Nepal as early as 1952. Till March, 1976, the total Indian aid to Nepal had been around Rs 172 crores (NC) out of the Rs 500 crores (NC) aggregated and received by it. The US aid to Nepal had been of the order of Rs 148 crores (NC).[12] India's assistance crossed the Rs 200-crores mark (NC) by 1978-79. Thus, India tops the list of the aid donor countries to Nepal.

In its aid programme to Nepal, India seems to be putting emphasis on the industrialisation. In this respect, the "memorandum of joint investment and industrial cooperation" concluded between the two countries in September, 1978, is of considerable importance. Under this agreement, India has agreed to set up cement, paper and pulp and other industrial projects in Nepal at a total cost Rs 2,610 million.[13] Nepal is the first neighbouring country where joint industrial ventures have been encouraged. Besides, India has agreed to finance the Rs 300 million Devighat hydro-electric project under an agreement concluded in October, 1978. Both the countries have agreed to undertake joint water resources and water control projects for mutual benefit.

In sum, it can be said that India has adopted a realistic approach towards Nepal in the 1970s. India has made efforts to strengthen its relations with Nepal on a bilateral basis. It may however, be contended that while adopting a policy of bilateral relationship, India cannot ignore the geo-political realities between the two countries. Therefore, there are bound to be certain special factors in India's policy towards Nepal

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TRADE WINDS

Sugar Control Order

In pursuance of the cabinet decision of September 10 to arrest the spurt in sugar price and to make sugar available at reasonable prices to the consumers, the government of India has issued Sugar (Price Control) Order, 1979, fixing the maximum ex-factory and retail prices for sugar. The order groups sugar factories in the country under four zones and fixes the maximum ex-factory prices in Rupees 260, 261, 268 and 270 per quintal.

The zone one comprises Punjab, Haryana, Rajasthan, Uttar Pradesh, Bihar and Madhya Pradesh with the ex-factory price fixed at Rs 268 per quintal. The zone two comprises Gujarat, Maharashtra, and Goa with ex-factory price at Rs 261 per quintal. The zone three comprises Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and Pondichery with the ex-factory price at Rs 260 per quintal. The zone four comprises Assam, Nagaland, Orissa and West Bengal with ex-factory price at Rs 270 per quintal. The maximum retail price has been fixed for various states and union territories in the range of Rs 2.90 to Rs 3.00 per kg.

The statewise break-up of retail prices is as following : (i) **Rs 2.98 per kg** for Haryana, Punjab, Rajasthan, Jammu and Kashmir, Delhi, Himachal Pradesh, Chandigarh, Uttar Predesh, Madhya Pradesh and Bihar. (ii) **Rs 3.00 per kg** for West Bengal, Orissa, Andaman & Nicobar, Assam, Nagaland, Manipur, Tripura, Meghalaya, Sikkim, Arunachal Pradesh and Mizoram; (iii) **Rs 2.91 per kg** for Gujarat, Maharashtra, Dadra & Nagar Haveli, Goa, Daman and Diu; (iv) **Rs 2.90 per kg** for Andhra Pradesh, Tamil Nadu, Karnataka, Kerala and Pondicherry; and (v) **Rs 3.00 per kg** for Lakshadweep islands. Octroi and other local taxes, where levied, would be allowed extra.

The Sugar (Price Control) Order, 1979 issued under the Essential Commodities Act will come into force with immediate effect on September 12, excepting the clause relating to retail price which will be effective from September 17 to avoid dislocation of the supply line. The state governments have been requested to enforce the provisions of the Sugar (Price Control) Order, 1979 vigorously and take effective measures to ensure the availability of sugar to the consumers at prices laid down in the order.

Import Licences for Small Industries

The value of import licences issued to small scale industrial units during the year 1978-79 shows a 71 per cent increase over 1977-78. The values for 1978-79 and 1977-78 are Rs 184.58 crores and Rs 107.75 crores respectively. The average value per licence went up from Rs 0.95 lakh in 1977-78 to Rs 2.05 lakhs in 1978-79. The share of the small scale units in the tolal value of licences issued during 1978-79 was 4.6 per cent. The share of small scale industries sector in the total value of licences issued for raw material imports in the manufacturing sector was 36.48 per cent.

Small-Scale Sector

Considering the licences issued by the offices located in different places, the share of small scale sector to the total value of licences was seen to be maximum in the case of Ahmedabad. The maximum amount of licences to the small scale sector was issued by the Bombay office (39.02 per cent) followed by Calcutta (9.4 per cent). The value of licences issued to small scale industrial units varies from less than Rs 5,000 to rupees one crore. However, nearly 80 per cent of the units have received licences ranging from Rs 10,000 to Rs 5 lakhs. In terms of value, this group constitutes 50 per cent of the total. About 25 per cent of the total value of licences (Rs 46.98 crores) was accounted by the value range of Rs 5 lakhs to Rs 25 lakhs.

Out of the 9,017 small-scale industrial units to which import licences have been issued during the year, 6,384 units (70.80 per cent) were old, 2,488 units (27.59 per cent) were new and 145 units (1.61 per cent) were proposed ones. In terms of value, 79 per cent of the value of licences was accounted for by the old units, 19 per cent by new units and the rest two per cent by proposed units.

Licences worth Rs 10,194.45 crores (53 per cent) were received by units in 39 industrial groups. Among these the maximum share went to chemical industries (15 per cent) followed by non-ferrous metal industries (14 per cent). However, while the share of chemical industries was less as compared to the previous year, it was more in non-ferrous metals. Value of licences issued to units located in backward areas showed a phenomenal increase during the year 1978-79 in comparison to that in the year 1977-78. Licences issued to science and engineering graduates during the year went up in terms of number but not so in value.

Loans for Small Farmers

The banks in India are hereafter to formulate model schemes and do advance planning to collect and process loan applications of small and marginal farmers with a definite calendar of operations. This is one of the important measures suggested by the Reserve Bank of India to lending banks for simplification and rationalisation of lending procedures in banks.

Another important step is that "margin" money will not normally be stipulated for crop loans to small and marginal farmers up to Rs 5,000. "Margin" money will not also be stipulated for term loans to small and marginal farmers, agricultural labourers and other specified categories of borrowers up to the cost of an economic unit or Rs 5,000, whichever is less, where a subsidy is available under special agricultural and rural development programmes like SFDA, DPAP and IRDP.

Under the liberalised measures, crop loans upto Rs 1,000 will be sanctioned on the security of a DP note/loan agreement only. Further, crop loans of Rs 1,001 upto Rs 5,000 will be sanctioned on a hypothecation of crops. Investment loans upto Rs 5,000 will be sanctioned on hypothecation of assets when moveable assests are created out of loans.

In addition, crop loans over Rs 5,000 and term loans over Rs 5,000, where moveable assests are created out of loans, and for term loans of Rs 1,000 and above where moveable assets are not created out of loans, the taking of a mortgage of land as security is left to the discretion of the banks. In states where legislation on the lines suggested by the Talwar committee has been enacted the mortgage of land will not be necessary. A simple declaration creating a charge on the land offered as security, will be considered sufficient.

The simplified procedures include adoption of model application forms by all commercial banks, made available in all regional languages. The production of photographs for literate farmers will be waived. For loans to illiterate farmers, the banks will not only meet the cost but also make arrangements for taking the photographs. A register of loan applications, indicating the date of receipt and sanction or rejection of loans will also be maintained by bank branches.

Export of Silver Products

The export policy on manufactures and products wholly or mainly of silver with more than 50 per cent silver content has changed and their export is to be allowed "On Merits". It has now been decided that such cases of pre-control commitments in respect of export of manufactures and products wholly or mainly of silver with more than 50 per cent silver contents will be considered subject to fulfilment of the following conditions : (1) Where irrevocable letters of credit had been opened by the foreign buyers up to March 30, 1979 and which are still valid or if expired had been revalidated prior to March 30, 1979 and where shipping bills had been passed by the customs for shipment of goods after examination of goods on or before March 30, 1979; (2) Where payment has been made to a bank by the foreign buyers in foreign currency in the exporters' favour and the bank had received such payment on or before March 30, 1979 on the exporters' account and the documentation and shipment has been or will be made in accordance with the terms, conditions and timings, if any, specified in the contract for shipment after the receipt of the funds in advance.

The exporters concerned should send their claims to the

THE DELHI CLOTH & GENERAL MILLS CO. LTD.

NOTICE

It is hereby notified for the information of the public that the Delhi Cloth & General Mills Co. Ltd., proposes to make an application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval for the establishment of a new undertaking for manufacturing Sulphuric Acid and Single Superphosphate. The turnover is expected to be Rs 7.2 crores. Other particulars of the proposed new undertaking are as under :-

1. Name of the proposed undertaking —A new name will be given to this undertaking.
2. Name(s) of the persons or authority/authorities proposing to establish the new undertaking. Where it is a body corporate, furnish details of its management structure together with those of the proposed undertaking —The Delhi Cloth & General Mills Co. Ltd., Delhi. It is managed by Managing Directors. The new undertaking will be a unit of Delhi Cloth & General Mills Co. Ltd., and will be managed by the existing Managing Directors.
3. Capital structure of the applicant person or authority and of the proposed undertaking.

	(Rs in Crores) Applicant	Proposed Undertaking
Authorised	50.00	It is not proposed to raise any share capital for this project.
Issued, Subscribed, and paid-up :		
Preference	2.17	
Equity	17.40	
Total	19.57	

4. Proposed location of the new undertaking. —In one of the backward districts of Punjab.
5. Brief outline of the cost of the project, the scheme and source of finance. —The estimated capital outlay is Rs 5 Crores, which is proposed to be financed by long term loans and internal resources.

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhawan, New Delhi, within 14 days from the date of publication of this Notice, intimating his views on the proposal and indicating the nature of his interest therein.

SHRIRAM

Sd/-
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DCM-32

regional licensing authority concerned alongwith documentary evidence relied upon in support of such commitments. The exporters should send the original documents by registered post AD on or before September 27, 1979 to enable the licensing offices to determine the eligibility for issue of an export licence on the conditions indicated above. Cognizance will be taken only of cases where these documents have been filed in time and cases in which claims are accepted will be given time up to 15 days to effect shipments. Submission of such evidence shall not, however, confer any right on the person concerned to the grant of any export licence or permission to export.

Award for Air-India

Air-India's house magazine, *Magic Carpet*, edited by Capt J.R. Martin, has been declared the 'Best Overseas Publication' at the annual meeting of the Airline Editors Forum of the Air Transport Association of America at Atlanta, Georgia, recently. A panel of judges headed by the famous aviation writer, Mr Robert Serling, called the *Magic Carpet* a well edited publication with a good balance of features and articles". The first prize, in a tie-up with Japan Airlines, was awarded on the basis of excellent lay-out and design, including general appeal and a strong impact of the publication. This is the third time that Air-India has won this award.

Laser Rod Production

India has ordered equipment from Britain for the production of laser rods. Metals Research Ltd, of Royston (Eastern England), is to supply complete crystal growth cutting, polishing and quality monitoring equipment for the production of aluminium-garnet laser rods. Britain's Royal Signals and Radar Establishment has carried out development and technical work on the system, while Metals Research received the order worth about £150,000 from the Indian ministry of Defence through the company's representatives in India.

The production system consists of a high-temperature oxide crystal growth unit with automatic control of the crystal diameter, cutting and polishing equipment. The equipment ordered includes optical quality-checking instruments to enable laser rods to be fabricated. Laser rods form the active component of a laser system and act as the light-intensifying vehicle. They are situated within a reflective cavity and are fed with a light from a high-intensity source.

New Railway Division at Trivandrum

The ministry of Railways has decided to set up a full-fledged division at Trivandurm on the Southern Railway. The new division will have jurisdiction over Shoranur (exclusive)-Ernakulam-Cochin Harbour, Ernakulam-Trivandrum and Trivandurm-Kanya Kumari sections. The Shoranur-Cochin Harbour section will be detached from the Olavakkot division and the other two sections will be detached from the Madurai division.

The approval of the Railway ministry for the setting up of the new division has been conveyed to the Southern Railway. The ministry has also sanctioned Rs 50 lakhs for taking up the preliminary ur-

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gent works required for the formation of the new division. The new division will be inaugurated on October 2, 1979.

Exports to West Germany

The declining trend in India's exports to West Germany has been reversed with exports during the first half of 1979 registering an impressive growth rate of 42.2 per cent. During 1978, India's exports to W. Germany decreased by 2.8 per cent. The positive trend beginning at the end of 1978 gained momentum during the last few months. The growth rate in exports was 22.7 per cent during the first quarter of 1979 and has now reached a record level of 42.2 per cent for the half yearly period. During the six-month period, India's imports from Germany remained within the overall growth rate of the recent past and increased by 14.4 per cent against 15 per cent during the corresponding period in 1977. This has helped in reducing the trade gap which, however, continues to be favourable to W. Germany.

Coal-based Fertilizer Project

India's first coal-based fertilizer projects at Talcher and Ramagundam, presently in an advanced stage of commissioning, are poised for going into regular production. Urea has been produced at both plant sites in trial runs with the use of external ammonia units with carbon-di-oxide of the required purity produced within the plants themselves. While urea was produced for the first time in Talcher on August, 17, in Ramagundam the first urea prills started flowing on September 10. These two projects have an installed capacity each of 4.95 lakhs tonnes of urea per annum, equivalent to 2.28 lakhs tonnes of nitrogen as plant nutrient.

The investment on these projects is of the order of Rs 200 crores each and they are amongst the biggest of their type in the world. The unique feature of these projects is the 4-headed coal gasifier, installed for the first time anywhere in the world; each project has three of them, equivalent to 900 tonnes of ammonia per day. Another notable feature is the maximum utilisation of Indian engineering and fabrication capabilities in the installation of these plants. It is expected that, in another 4 to 6 weeks, the plant will be producing their own ammonia and, by the turn of the year, the plants will be on commercial production.

Exports Award for Glaxo

Glaxo Laboratories (India) Limited have won the 'Basic Chemicals, Pharmaceuticals and Cosmetics Export Promotion Council's Chemexcil Award for their export performance in the year April 1978-March 1979. This is the third time in five years that Glaxo has been declared the winner by the council, the previous years being 1974-75 and 1975-76. The company's exports of Rs 246 lakhs have registered an increase of 148 per cent over the previous export year. This is all the more creditable considering that the total exports of pharmaceuticals and drugs from the country (exluding medicinal castor oil) are below that of last year.

Glaxo has added now basic drugs and drug intermediates, all manufactured at its Fine Chemicals Factory at Thane, Maharashtra, to its list of exports to developed countries, including the USA, France, West Germany, Japan, Australia, New Zealand and Ireland. The company's major exports are to Russia and, here again, new drugs and formulations have been added to the range of products exported. Glaxo is hopeful of achieving a still better export performance during the current year.

IDB Aid for Fishing

With a view to expediting rehabilitation of the fishing units which have suffered damage in the recent devasting fire at the fishing harbour of Malpe near Manipal, IDBI has announced the extension of benefit under "Special Refinance Facility, 1979" (SRF, 1979), whereunder refinance on soft terms will be made available to eligible credit institutions in respect of the rehabilitation assistance sanctioned by them to such units, provided the purpose is to rehabilitate the machinised and purse-seine boats, boat building yards and fish curing yards.

The salient features of the scheme are as under : (a) Refinance under SRF, 1979, will be available to fishing units affected by fire subject to a ceiling of Rs 25 lakhs. (b) The usual norms of margin, promotor's contribution, debt-equity ratio, etc., will not apply. (c) Full 100 per cent refinance will be provided. (d) Interests/service charge : (i) Loans for amounts upto Rs 25,000 will be refinanced by IDBI at the nominal service charge of one per cent p.a., while the eligible credit institutions will be allowed a maximum spread of one per cent p.a. so that the loans reach the units at not more than two per cent p.a. This should cover all small units affected by the fire. (ii) Loans for amounts above Rs 25,000 will be refinanced at the concessional rate of six per cent p.a. The eligible credit institutions will be allowed a maximum spread of $1\frac{1}{2}$ per cent p.a., so that the loans reach the units at the soft rate of not more than $7\frac{1}{2}$ per cent per annum.

Deposit Insurance

The Deposit Insurance Scheme has been extended to cooperative banks in the state of Gujarat with effect from September 1, 1979. Accordingly, insurance cover is now available to deposits with cooperative banks in this state to the same extent as is available in respects of deposits with commercial banks. The Deposits Insurance and Credit Guarantee Corporation has registered 277 eligible cooperative banks in the state as insured banks, They include one state cooperative bank, 21 central cooperative banks and 255 primary cooperative banks (including one salary earners' society). With the extension of the scheme to Gujarat, there are now 1,389 registered insured banks—all the 78 commercial banks, 56 regional rural banks and 1,255 cooperative banks in the states to which the insurance scheme has been extended so far. Of the 1,255 registered cooperative banks, 75 are in Andhra Pradesh, 277 in Gujarat, 5 in Jammu and Kashmir, 210 in Karnataka, 58 in Kerala, 67 in Madhya Pradesh, 351 in Maharashtra, 27 in Orissa, 40 in Rajashthan, one in Tripura, 70 in Uttar Pradesh, 56 in West Bengal, 11 in Delhi, 5 in Goa, Daman Diu and 2 in Pondicherry.

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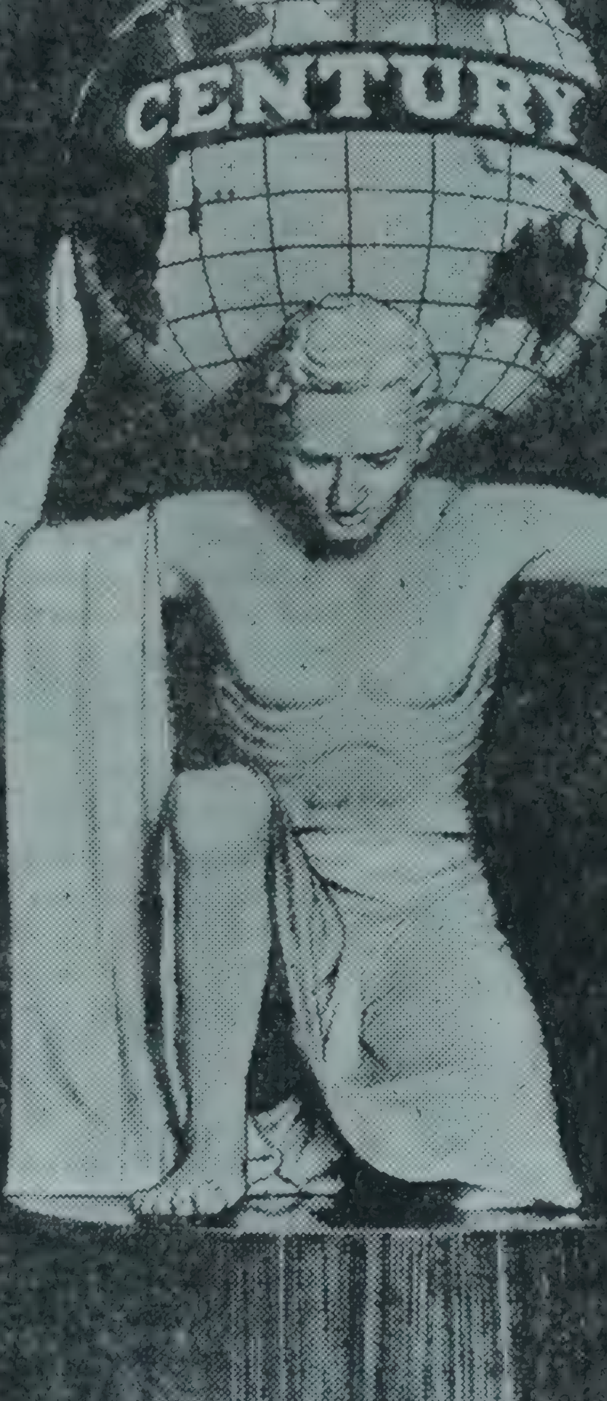

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COMPANY AFFAIRS

SOS from Scooters India

THE SEVENTH annual report of Scooters India Limited for the year ended March 31, 1979 discloses that the directors are making a painful effort to come to terms with the harsh realities of the financial mess in which the company has landed itself. Although turnover has improved from Rs 10.46 crores in 1977-78 to Rs 15.59 crores in 1978-79 and the loss before providing for interest and depreciation has been brought down from Rs 8 lakhs to rupees one lakh, thanks to the heavy interest charges of Rs 2.94 crores (Rs 2.29 crores) the net loss for the year is higher at Rs 4.19 crores (Rs 3.58 crores).

The company is operating under a very adverse debt equity ratio. As against the equity of Rs 5.09 crores, loans from the government of India amount to Rs 13.91 crores and from financial institutions Rs 3.20 crores making a total of Rs 17.11 crores, while to these borrowings is to be added a term loan of rupees one crore from a bank. The accumulated losses were Rs 15.23 crores as on March 31, 1979 and the net worth went down to minus Rs 11.36 crores. The percentage of loss to equity capital was 81.57 in 1978-79 and to equity capital employed 38.04.

Although the output has been improving and is expected to continue to progress, there is no near possibility of the company being able to service its heavy borrowings. It fact it has already approached the financial institutions to grant moratorium on payment of instalments and interest and the government of India to convert a part of non-plan loans to the extent of Rs 4 crores to the equity, besides waiving interest and granting holiday and moratorium on payment of instalments on loans.

The governments present holding in the subscribed and paid-up capital of Rs 5.09 crores included 905,000 shares of Rs 10 each allotted to it as fully paid persuant to a contract without payment being received in cash and another 250,000 shares of Rs 10 each allotted in conversion of loans. In view of the large public participation in the share capital of this losing joint-sector firm, the government seems to be under an obligation to contribute its utmost to rescue it from liquidation. The company's equity share is quoted around Rs 6.50 on stock exchanges.

While the financial showing of the company has been consistently poor, some effort is apparently being made to improve its manufacturing and marketing organisation and activities. The production of scooters went up from 16,314 in 1977-78 to 23,027 in 1978-79 and power packs for scooters 11,408 to 15,773. The existing installed capacity for two-wheelers is 80,000 power packs per annum and the company is aiming at the utilisation of over 78 per cent of installed capacity during the current year of 1979-80 by turning out 41,000 scooters and 21,000 additional power packs. To some extent the company's fortunes are bound up with the performance of joint-sector scooter plants in Bihar, West Bengal, Kerala, Andhra Pradesh and Karnataka which use power packs supplied by Scooters India Limited in their own operations. To a very large extent however, the troubles of Scooters India Limited are due to its own wrong decisions in both manufacturing and marketing areas and above all to errors of judgment in its corporate planning.

Potential Market

The market for scooters is large both actually and potentially and while Bajaj Auto may be reigning sovereign in the field, Maharashtra Scooters Limited, functioning under the umbrella of Bajaj Auto, has been able to score significant marketing and financial successes. Although Scooters India had problems in selling its scooters during the period of teething troubles in its plant, the product which it has since been able to place in the market seems to have won considerable consumer acceptance and, provided the plant can maintain a viable level of production, it should not be impossible for it to break even and subsequently become profitable. The management says that the company has received substantial assistance from a UK firm of consultants in the areas of capacity utilisation and technical upgradation. Assuming that this assistance will show results in its manufacturing performance, it could be suggested that the management would do well to step up the effectiveness of its marketing services and sales network.

Hotel Horizons

Emphasising ITC's intensified interest in pastures new, Mr A.N. Haksar, the company's chairman, devoted his speech to the latest annual general meeting to an enthusiastic analysis of the dynamics of hotel industry as a part of the global growth industry of tourism and placed within this broader setting ITC enterprise in furthering national interests in the development of tourism. He pointed out that the composite tourism industry, including hotels, was a part of the expanding international trade in goods and services within which it represented the fastest growing and largest element of what economists called invisible trades and its earnings. Thereby he refuted the all-too-familiar misconception that the luxury hotel trade was anomalous or irrelevent in terms of the social and economic circumstances of the developing countries.

Tourism, including hotels, being the second largest industry in the world, with a rapid rate of growth which is predicted to help it to overtake oil in the coming decade, developing countries, seeking to better their position in the world exchange of goods and services, may neglect the opportunities of the tourist trade only at their peril. Mr Haksar suggested that the tourism hotel industry had an in-built expansion dynamic through its internal cash generations and slowly depreciating assets, as a result of which growth could be generally financed without undue diversion of resources from other priority areas. It is, therefore, very much in the interest of India to exploit its vast potential and actual historic, cultural and other endowments to improve its meagre share of the global tourist traffic. Mr Haksar drew attention to the fact that the number of non-ethnic genuine tourists visiting India was around one half million only, although world tourist traffic in 1978 was of the order of nearly 270 million and poised to grow at a rate between eight per cent and 10 per cent per annum.

Note of Optimism

Making a handsome reference to other entrepreneurs in developing the tourism hotel industry in India through internationally famous hotel chains, Mr Haksar spoke with justified pride of the achievements of ITC itself in this field. A newcomer to a highly sophisticated and intensely competitive trade, the ITC's "Welcomegroup" is fast becoming a prominent network in the national tourism hotel business and has succeeded considerably within a short span of under four years in building up its own distinctive market personality and culture of hospitality. Much of this progress flows from the Welcomegroup's recognition of the international character of tourism and the truth that, the tourism hotel industry can have no national frontiers in offering of its best to its clientele.

It is in persuance of this corporate philosophy and planning that the ITC Hotels Division, as Mr Haksar explained, has concluded an international marketing and reservation services, arrangement with the internationally famous Sheraton chain. In an attempt, evidently, to answer criticism of this agreement in parliament or elsewhere, Mr Haksar made a confident statement of the advantages of the agreement not only to the Indian party but to the Indian tourist industry itself and claimed that "the Sheraton linkage aids, reassures and its vast organisation provides confidence to foreign travellers and travel trade that is convincing."

In this context, the bullish sentiment prevailing in the tourism hotel industry is worth taking note of. Mr M. S. Oberoi, chairman of East India Hotels Ltd., mentioned at the recent annual general meeting of the company that the department of tourism having estimated that by 1982 approximately 40,000 rooms would require to cope with the prospective tourist traffic, large investments of the order of some Rs 340 crores, would be required. This would be a paying outlay since the amount that the foreign tourist spends in India is going up as is seen from the fact that, whereas the fareign tourist spent on an average Rs 1,368 in 1968-69, the corresponding expenditure currently is Rs 4,419. India's earnings from foreign exchange from the tourist trade have consequently been able to rise Rs 330 crores during 1978.

An interesting point emphasised by Mr Oberoi is that approximately 65 per cent of the tourists coming to India choose to stay in Five-Star or Four-Star hotels. There is not enough accommodation of this quality to cope with their demand. While this has no doubt helped well-known hotel chains to report high occupancy figures—Oberoi Towers in Bombay, for instance, registered an occupancy report of 95.53 per cent in July 1970—, the tourism hotel industry threatens to burst at the seams unless accommodatio and the connected services ar augmented speedily. It ha been thought necessary, fo instance, to plan for additiona accommodation of 200 room in Oberoi Towers, Bombay, making a total of 700 rooms This will be a step toward the fulfilment of the original master plan which aims at an aggregate of 1,000 rooms, which is expected to make this hotel the largest in the country.

Meanwhile, the profitability displayed by hotel companies during 1978-79 has quickened investment interest in hotel shares. East India Hotels Ltd has shown a net profit of Rs 4.98 crores in 1978-79 as compared with the Rs 2.95 crores in 1977-78 and has been fancied in stock exchanges at higher level and Indian Hotels and ITC have also benefited from the prevailing optimism. Incidentally, Mr J.R.D. Tata, chairman of Indian Hotels Company Ltd, recently spoke of a bonus issue at the rate of

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ilkington Glass

Pilkington Brothers, Britain's giant glass manufacturing concern, is making a bid o become the world's biggest glass-maker. It has made a £120 million take-over bid for Flachglas, one of the largest glass manufacturers in West Germany.

The deal, which has still to receive the approval of shareholders and government, would give Pilkington a 55 per cent interest in Flachglas and total ownership of glass manufactures in Belgium and Holland.

At present Pilkington does not manufacture glass in the other European Community countries.

Announcing the bid on September 14, a spokesman of the company said that the takeover would fill the last significant gap in the company's worldwide operations.

Pilkington, which has an annual worldwide sales of some £550 million, currently has glass manufacturing facilities in Canada, Australia, New Zealand, Rhodesia, Nigeria, Sweden, Denmark, Argentina, Jamaica, India, Singapore, Malaysia, Japan, the United States, Brazil, the Netherlands, Hong Kong, Mexico, Finland and Spain.

Bombay Suburban Electric Supply Limited

Incorporated in 1929, the Bombay Suburban Electric Supply Limited is fifty-years young. Its shareholders have been rewarded with a golden jubilee dividend of rupees two per share along with the final dividend for 1978-79. This is perhaps only symbolic of the good account this company has given of itself over the past 50 years to investors who have put their savings into it. Started with less than 1,000 consumers, the company is now serving 560,455 consumer points in the Bombay suburban district. Sales of energy have multiplied 1,300 times and fixed assets 300 times since its first year of operation. Indicative of the potential for further growth was the increase of 11.95 per cent in energy sales during 1978-79. To meet this growing demand the installed bulk transformer capacity was raised by 23 MVA during the year accompanied by additions to sub-station capacity to the extent of 17.19 MVA.

Avoidable Delay

This kind of extension of services is only marginal to the company's central project for expanding substantially its low generating capacity by installing two sets of 210 MW each or one set of 500 MW. Unfortunately, much avoidable delay has been caused by the uncertainty which developed over the vesting of the company's electrical undertaking in 1976. Consequently, the company has not been able to take effective steps in the last three years for implementing this scheme. However, its chairman, Mr R.P. Aiyer, had some good news to give in his latest statement to the shareholders. In June this year, the project was forwarded to the central government by the state government, which has recommended it on the basis of the availability of West German credit. The Central Electricity Authority is now engaged in a technical appraisal of the project and the promptness with which it processes its clearance could be a test of the awareness of power planners and policy makers to the urgency of augmenting power capacity in regions where the community has already suffered social and economic losses because of the lag in power development.

In this context, certain observations made by Mr Naval H. Tata, chairman of the Tata Power Company Limited, in his recent statement to the annual general meeting of the company, are obviously relevant. To quote; "Our national plans for the supply of electric power have traversed a tortuous course over the past years. We seem to have embarked on preparing numerous projects with high expectations. In this mood, our planners have unconsciously ignored the mounting cost escalations occasioned by delay and indecision, on the part of those

Raunaq & Company Pvt. Ltd.

NOTICE

It is hereby notified for the information of the public that Raunaq & Company Pvt. Ltd., have made application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval for the establishment of a new undertaking for manufacturing and marketing of Sulphuric Acid and Ferric Allum unit. The turnover is expected to be Rs. 125 lacs at full capacity. Other particulars of the proposed new undertaking are as under:

1) Name of the proposed undertaking:
   A new name will be given to this undertaking.
2) Name(s) of persons of authority/authorities proposing to establish the new undertaking. Where it is a body corporate furnish details of its management structure together with those of the proposed undertaking:
   Raunaq & Company Pvt. Ltd., New Delhi. The Company is managed by the Managing Director subject to Superintendence control and directions of the Board of Directors.
3) Capital structure of the applicant person of authority and of the proposed undertaking:

   Authorised

   Equity Shares : 23 lacs
   Preference Shares : 2 lacs
   Total : 25 lacs

   Proposed Share Capital: 103.90 lacs
4) Proposed location of the New Undertaking:
   In one of the backward area of Haryana.
5) Brief outline of the cost of the project the scheme and source of finance:
   The estimated capital outlay is Rs. 274.76 lacs, which is proposed to be financed by share capital and long term loans.

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhawan, New Delhi, within 14 days from the date of publication of this notice intimating his views on the proposal and indicating the nature of his interest therein.

S. S. Kanwar
MANAGING DIRECTOR

Dated this day of Twelveth September'79
Regd. Office: 14-15/F, Connaught Place,
New Delhi-110001.

responsible for the final approval of the projects, taking a tremendous toll of the nation's scarce resources."

As was mentioned earlier, the uncertainty about the future of the company's licence had come in the way of the Bombay Suburban Electric Supply Limited proceeding with the establishment of new generating units. Its chairman, Mr R.P. Aiyer, points out that this uncertainty has also compelled the company to limit its investment on strengthening the distribution system, having regard to internal finance accruals. It has therefore become necessary now to allocate a higher measure of finance for distribution development. This financial burden has become all the more heavy because of the recent spurt in the prices of materials such as cables, switchgear, meters, transformers and other items. Meanwhile the lag in investment on distribution and development is tending to have an adverse effect on system loss.

Relevant Fact

Once again Mr Naval H, Tata has something relevant to say: "It is unfortunate that, in some influential quarters, inspired by ideological considerations, there are leaders who still advocate the philosophy of confining the electricity industry to the public sector only. In doing so, they fail to realise that this is not an area where the entry of the private sector deprives the state of its legitimate right in the field of public utility. The current power shortage is of such a magnitude that all the resources of the state electricity boards put together would not be enough to meet the total demand. Hence there is ample scope for both (public and private sectors)."

Gwalior Rayon

The Gwalior Rayon Silk Mfg (Wvg) Co. Ltd will issue 2,000,000 equity shares of Rs 10 each for cash at a premium of Rs 25 per share to existing shareholders who are individuals, employees of the company and the Indian public. The subscription list will open on September 25, 1979 and will close on October 11, 1979 or earlier at the discretion of the directors but not before September 27, 1979.

The company, by developing self-reliance in the manufacture of rayon grade pulp and viscose staple fibre, as pioneers in the country, has not only substantially increased the availability of textile fibres in the country, but has also reduced the drain of valuable foreign exchange, saving about Rs 220 crores on this account during the period of last about two and a half years alone.

The company has already set up joint ventures for production of viscose staple fibre in Thailand and another in Philippines for production of manmade fibre and synthetic fibre yarn. Necessary permission has also been received recently by the company for setting up of a joint venture project for the manufacture of carbon black in Thailand. The company is also exploring possibilities in Philippines for establishing a big chemicals complex to produce rayon grade pulp and cellulosic fibre which will open further avenues for exports of plant and machinery.

The company's application for issue of industrial licence for the manufacture of eight lakh tonnes per annum of portland cement at Jawad (MP) is under government's consideration,

The government of India has also approved the company's polynosic type high performance fibre project and stipulated that the company should within the time allowed issue fresh equity capital of the face value of Rs 2 crores to the Indian public. The authorised capital of the company is Rs 25.50 crores and issued subscribed and paid up capital is Rs 19.32 crores.

Zenith Steel

Mr D.M. Dalal, chairman, Zenith Steel Pipes and Industries, has told the shareholders that the working results of the company during the first four months of the current year (May-August 1979) are better than those during the corresponding period of the previous year despite various constraints. The total sales during the period have amounted to Rs 11.34 crores against Rs 9.76 crores. The results of the next eight months will depend upon the availability of steel and power. The company is making efforts to overcome the difficulties posed by the recent bank credit squeeze. It is diversifying its activities and the chemical project at Tarapur is coming up well.

The production of pipes during the first four months of the current year has totalled 10,000 tonnes against 17,000 tonnes. But, exports of pipes during the period have fallen from Rs 2.17 crores to Rs 1.65 crores owing to changes in the government's policy for pipe exports. Production of special steel came down from 7,400 tonnes to 6,000 tonnes which is attributed to power cut. The output of shares has also fallen by about eight per cent.

The shareholders have been told that 25.51 per cent of the divident for the year ended April 1979 has been provisionally exempted in the hands of the shareholders. During the year, fixed assets addition has been to the extent of Rs 3.06 crores.

Herdillia Chemicals

Herdillia Chemicals has fared better during the first half of the current year compared to the same period of 1978. Sales during the period January-June 1979 totalled Rs 11.73 crores against Rs 10.85 crores in the same period of 1978. The gross profit is also higher at Rs 2.77 crores against Rs 2.43 crores. After providing Rs 42.54 lakhs (Rs 39.98 lakhs) for depreciation and amortisation the profit before investment allowance and taxation is higher at Rs 2.35 crores against Rs 2.03 crores.

The sales turnover would have been higher but for severe power cuts during May and June 1979 and inadequate availability of orthoxylene earlier in the year. Better margins were achieved on phthalic anhydride and phthalates, which have reflected in improved profitability. The company has enough internal generation capacity to meet resonable power cuts and assuming usual post-monsoon reliefs the outlook for the second half of the year is considered generally satisfactory. The full impact of the steep petroleum price increase announced on August 17 on feedstock costs and demand for the company's products is still to be assessed.

Reliance Textiles

The 1,40,000 eleven per cent convertible mortgage debentures of Rs 500 each aggregating to Rs 7.00 crores of Reliance Textile Industries Limited will open on October

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3, 1979. The issue will close on October 13, 1979, or earlier but not before October 5, 1979. The entire debenture issue is being raised to finance a part of the project cost of Rs 18.50 crores to instal 12,500 spindles and other equipment for the manufacture of manmade fibre yarn. The company has at present to depend on outside source for its requirements of yarn. The balance requirement of funds for the project is being met through term loans of Rs 6.3 crores, rights issue of equity shares 6,47,832 at a premium of Rs 15 per share aggregating to Rs 1.62 crores and Rs 3.58 crores out of internal cash accruals. The project is in advanced stage of implementation and is expected to go into commercial production in November, 1979.

Attractive Feature

The debenture will be secured by creation of charge on the fixed assets of the company and carry interest at eleven per cent per annum. The most attractive feature of the issue is that 20 per cent of the debentures are convertible into four equity shares of the company at a premium of only Rs 15 per share at the option of the debentureholder. The current market price of the share is around Rs 69. In the event of a bonus issue, the debentureholders exercising their option of conversion shall be entitled to augmentation proportionately. The balance amount of Rs 400 or those not exercising their option of conversion (Rs 500) shall be repaid in five equal instalments on the expiry of the 8th, 9th, 10th, 11th and 12th year from the date of allotment. The debentures would be listed on Bombay, Ahmedabad, Delhi and Madras Stock Exchanges. The company has retained the right to repurchase the debentures from the market.

ABS Plastics

ABS Plastics, the first to manufacture ABS (acrylonitrile butadiene-styrene) resins in the country, went on stream in July, 1978. The company was able to stabilise its production from November 1978. Its plant at Nandesari near Baroda (Gujarat) has the licensed capacity of manufacturing 2,000 tonnes of ABS resins per annum. For the last three months it has been producing at the rate of 105 tonnes a month.

According to Mr R. S. Agrawal, managing director, the company has produced about 550 tonnes of ABS resins in the year ended June, 1979 and sold about 450 tonnes. The turnover is expected to be around Rs 1 crore exclusive of excise duty. In 1979-80, the company hopes to sell about 1,500 tonnes of ABS resins. Mr Agrawal has said that the recent increase in the price of naptha has completely upset the company's working. The raw material prices have shot up increasing the cost of production by more than 50 per cent. He has said that a representation has been made to the authorities to grant suitable protection to this infant industry. He hope that such a protection will be granted soon.

Sutlej Cotton Mills

Sutlej Cotton Mills has raised equity dividend to 20 per cent for the year ended March 1979 from 15 per cent paid in 1977-78. Sales have increased by 35 per cent to Rs 15.38 crores from Rs 11.36 crores and the gross profit by 67 per cent to Rs 177.90 lakhs from Rs 106.40 lakhs in the previous year. After providing Rs 14.96 lakhs (Rs 17.44 lakhs) for depreciation, Rs 6 lakhs (Rs 5 lakhs) for investment allowance reserve and Rs 60 lakhs (Rs 30.50 lakhs) for taxation there is a disposable surplus of Rs 96.94 lakhs against Rs 54.46 lakhs. Equity dividend will absorb Rs 31.50 lakhs (Rs 23.63 lakhs) and the balance of Rs 65.44 lakhs (Rs 29.83 lakhs) has been transferred to general reserve.

Its textile unit in Rajasthan showed better working during the year. Financial institutions have approved the Rs 2 crores modernisation of the mills and sanctioned a term loan of Rs 110 lakhs under the soft loan scheme. The performance in the current year is also satisfactory.

Steel Tubes of India

Steel Tubes of India, Dewas (Madhya Pradesh), a leading manufacturer of precision steel tubes, has reported an all-round improvement in its working during the year ended March, 1979. Production, sales, both domestic and export, profits and margins are higher than in the previous year. Equity dividend has been stepped up from 12 per cent to 15 per cent and is covered by more than five and a half times by the year's earnings. With the expansion and modernisation of the plant, the company has started manufacturing certain value-added products like boiler tubes, propeller shaft tubes, heat exchanger tubes and shock absorber tubes.

Despite shortage of raw material and power, the company's production increased from 12,882 tonnes in 1977-78 to 17,662 tonnes in 1978-79. Sales rose by 55 per cent from Rs 5.45 crores to Rs 8.47 crores—domestic sales from Rs 4.78 crores to Rs 6.88 crores and export sales from Rs 67 lakhs to Rs 1.59 crores. With the gross profit increasing by 68 per cent from Rs 23.87 lakhs to Rs 40.04 lakhs, the ratio of gross profit to sales has improved from 4.4 per cent to 4.7 per cent. After provisions and adjustments, a sum of Rs 18 lakhs (Rs 9.60 lakhs) has been transferred to general reserve. Dividends will absorb Rs 3.75 lakhs (Rs 3 lakhs).

May and Baker

May and Baker (India), which manufactures pharmaceutical, photographic and agricultural formulations and laboratory chemicals, is to offer 6,00,000 equity shares of Rs 10 each at part to the Indian public mainly with the purpose of diluting the shareholding of May and Baker Co. Ltd. UK, to 60 per cent.

The company has an issued equity capital of Rs 180·16 lakhs at present of which shares worth Rs 180 lakhs are held by the British company. It now purposes to increase its share capital to Rs 3 crores by a fresh equity issue of 11,98,400 shares of Rs 10 each. Of this 5,00,000 equity shares worth Rs 50 lakhs are to be allotted to financial institutions, 98,400 shares to employees (which together with 16,000 equity shares already held by them make a total of one lakh shares) and the balance of 6,00,000 equity shares to the Indian public.

The Reserve Bank of India has allowed the Indian company to take over the business of the UK firm in India for a total consideration of Rs 3.5

crores. The UK company is to be allotted 17.5 lakh equity shares of Rs 10 each at par and the balance consideration of Rs 1.75 crores to be retained by the Indian company as interest-free loan repayable in not more than five equal annual instalments.

British India Corp.

The British India Corporation Ltd. has produced disappointing results for the year ended March 1979. The company has incurred a loss of Rs 109.25 lakhs on sales of Rs 18.63 crores against a profit of Rs 117.94 lakhs on sales of Rs 19.74 crores in the previous year.

After providing Rs 22.73 lakhs (Rs 26.29 lakhs) for depreciation and Rs 88,859 (Rs 2.22 lakhs) for investment allowance reserve and nil (Rs 30 lakhs) for taxation, there is a loss of Rs 132.87 lakhs against a surplus of Rs 59.43 lakhs in the previous year. Making some adjustments for previous years a debit balance of Rs 241.43 lakhs has been carried forward against a surplus of Rs 33.40 lakhs. Equity and preference dividends have been again passed over.

Larsen & Toubro

The working of Larsen & Toubro for the first five months of the current year, (April 1, 1979 to August 31, 1979) has been satisfactory. Sales totalled Rs 47.40 crores against Rs 38.17 crores in the previous year. Production rose to Rs 33.25 crores from Rs 30.57 crores. Order booking as on August 31, 1979 was Rs 48.31 crores compared to Rs 43.23 crores on August 31, 1978. The order backlog is Rs 95.73 crores compared to Rs 91.34 crores for the previous year.

The sanction of the Controller of Capital Issues had been received for the issue of 28,83,168 equity shares at a premium of Rs 12 per share. The letter of offer for right shares is to be mailed by the company to shareholders by the end of this month. An amount of Rs 11 (Rs 5 on account of capital and Rs 6 on account of premium) is payable along with the application. The last date for payment of application money is October 31, 1979. The balance amount of Rs 11 payable per share will be called after April 30, 1980. The right shares will rank pari passu with existing equity shares in all respects except that the entitlement to dividend declared for the year ending March 31, 1980 will be proportionate to the amount paid up on the shares. However, the dividend will be for the full year.

Joint Venture

The company has decided to set up a joint venture in Singapore to manufacture its line of bottle closure products such as roll-on pilfer-proof (ROPP) caps and aluminium foil 'ALU' capsules. The share capital of the proposed Singapore company will be Rs 1.50 crores. L&T will subscribe up to Rs 1.12 crores (75 per cent). The balance 25 per cent (Rs 37.5 lakhs) will be subscribed by the Development Bank of Singapore. Subject to the government of India's approval being received in time.

The cement project of the company is progressing satisfactorily. It received the letter of intent in February 1979. The first phase of the detailed prospecting of the limestone deposits has been completed, and the mining lease for these deposits is being granted by the state government. L&T has obtained the requisite licences for importing components and raw materials for this project. Orders will be placed shortly for these items. The estimated investment of Rs 66 crores in this project includes adequate provision for escalation in costs.

In order to meet the company's working capital requirements, the directors have proposed the issue of rights debentures to the extent of Rs 2.50 crores. These debentures will carry interest of 11 per cent per annum and will be repayable after 12 years.

Hindustan Brown Boveri

Recognising the need for improving the working performance of HBB, in 1968 the management of Brown Boveri & Company Limited, Switzerland, the then holding company of HBB approached L&T to acquire a shareholding in HBB and to work as a sales distributor. By end of 1973, BBC had reduced its majority shareholding in HBB to 27 per cent by transferring a substantial portion of its shares to L&T. Consequently, L&T shareholding also stood at 27 per cent. L&T was appointed sales distributor and selling agent for the period March 20, 1974 to March 19, 1979. During this period, the order booking went up by 300 per cent and sales increased from Rs 15.66 crores to Rs 29.93 crores. This enabled the company's operations to be significantly improved. The value of the HBB share had risen to Rs 265 in March 1979 after two bonus issues whereas it was below the par value of Rs 100 in 1972.

As HBB wished to set up its own marketing and sales organisation and had not renewed the appointment of L&T as sales distributor and selling agent for a further period, the L&T board of directors decided that it would be advisable to dispose of the shareholding of L&T and ECC in HBB instead of remaining as an investor. As a result of negotiations, a memorandum of settlement was signed between BBC and L&T on March 12, 1979 which stipulated that in accordance with the wishes of BBC, L&T should transfer its own shareholding and the shareholding of Engineering Construction Corporation Limited (a wholly owned subsidiary of L&T) to the financial institutions. The sale of HBB shares offered in one block to the financial institutions, was effected at a net price of Rs 210 per share; the average purchase price paid by L&T and ECC amounted to Rs 59 per share.

L&T Equity Shares Held by Financial Institutions

	No. of Shares	Percentage
Life Insurance Corporation of India	21,48,061	18.63
Unit Trust of India	4,77,628	4.14
Nationalised Insurance Cos.	12,31,201	10.67
Nationalised Banks	2,10,797	1.83
Total	40,67,687	35.27

RECORDS AND STATISTICS

Annual plan 1979-80

The annual Plan 1979-80, which was released on September 10, 1979, envisages a deceleration in the growth rate in the Gross Domestic Product to 4.04 per cent, from 7.25 per cent in 1977-78 and 4.46 per cent last year. The highlights of the Plan are reproduced below.

THE 1979-80 annual Plan document, released by the Planning Commission last week, while presenting an encouraging picture of the growth of the economy over the past four years—an average of just above five per cent per annum combined with a manageable external deficit, reasonable price stability and a sustained rise in public investment—has focussed attention on some disturbing trends that have developed recently.

The problems that need to be tackled, include: (i) the growing inflationary potential within the economy; (ii) the increasing non-Plan, non-developmental expenditure which could reduce the availablity of public savings to be applied to investment; (iii) a structural weakness in the balance of payments whereby the surplus on invisibles has to be relied upon to reduce the deficit on visible trade, with a falling rate of growth of merchandise exports; (iv) fall in the profitability of the public sector on account of poor performance in the power and transport sectors; and (v) the emerging shortages of fuel and construction materials.

The planners, however, feel that with available resources of food and foreign exchange, the above difficulties can be faced. The growth momentum, they opine, can be maintained through improved performance in the key sectors of power and transport and effective short-term management of the economy as a whole.

The document also refers to some decline in public sector savings as a proportion of the GNP and attributes it to increased public consumption through: (a) increased subsidies on food, fertilliser and exports; (b) increases in dearness allowance, pensions etc; (c) lower resource mobilisation efforts by the states than the levels agreed for their annual Plans; and (d) increases in the burden of debt servicing and defence outlays. If the public sector investment targets are to be realised, it suggests, the growth of public consumption and expenditure will have to be restrained.

According to the short-term forecast, the overall investment in the current financial year is expected to be maintained at a reasonable ratio of 23.4 per cent of the Gross National Product on account of higher imports resulting from the recently introduced liberalisation measures. The public sector gross fixed investment is expected to increase from Rs 9,538 crores in 1978-79 to Rs 10,387 crores, while the private corporate investment is anticipated to go up from Rs 1,991 crores to Rs 2,229 crores.

The projections of growth of agricultural output in the current years' Plan, based on the assumption that this year will be a normal year with average rainfall both in terms of total precipitation and distribution, suggest that the expected levels of output of selected agricultural products are likely to be as given in Table I.

Power generation in the country, the document says, went up from about 99 billion units in 1977-78 to over 109 billion units last year—an increase of about 12.5 per cent. The new generation capacity fully commissioned last year was of the order of 1.5 million kws. Besides, the erection of another 1.5 million kws generation facilities had been completed and the units rolled or put on turning gear, the actual generation from the units constituting this capacity will start early this year. It is expected that the installed generation capacity will be augmented during the current financial year by 2.8 million kws, if not more taking the aggregate capacity to 31.8 million kws by the end of the year. The total generation including that from non-utilities, is expected to exceed 117 billion kws. The targets for rural electrification have been set at 25,000 new villages and 400,000 pumpsets.

An outlay of Rs 2,472.75 crores is to be incurred for the power sector this year—Rs 2,029.36 crores in the state plans, Rs 35.92 crores in the union territories and the balance Rs 407.47 crores in the central sector (including NEC). This investment will be about

TABLE I

Agricultural Output Projections

Crop sector	Unit of production	1977-78 actuals	1978-79 anticipated	1979-80 forecast
Foodgrains	Mill. tonnes	125.60	130.50	133
Oilseeds-5 Major	Lakh tonnes	89.33	94.33	99
Sugarcane	Mill. tonnes	181.63	180.00	179
Cotton-Lint	lakh bales*	71.03	76.00	79
Jute/Mesta	lakh bales†	71.17	81.00	79

†180 Kgs. each *170 Kgs. each.

1.5 per cent higher than in he last year.

Industrial production, which n 1978-79 is estimated to have rown by 7.8 per cent over he previous year, as compard to 3.9 per cent growth in 978-79, is expected to show ubstantial increases during the urrent year in a number of ndustries (see Table IV). The overall growth rate is anticipated to remain between seven and eight per cent. This, however, would require special efforts in achieving the required growth rate in certain crucial areas like coal, steel, cement, electricity, etc, coupled with an improvement in railway movement.

The contribution of the various segments of the economy to the Gross Domestic Product is expected to be as shown in Table II.

Growth Rate

The growth rate is envisaged to decelerate to 4.04 per cent from 7.25 per cent in 1977-78 (CSO's quick estimate) and 4.46 per cent forecast for 1978-79. **But it is felt that the envisaged growth path would be consistent with the target growth rate of 4.7 per cent per annum for the sixth Plan period.** The growth rate in 1979-80, the document says, however, could be above five per cent if favourable weather conditions lead to foodgrains output of the order of two million tonnes above the forecast and all sectors of industry meet the production targets set by the annual Plan

The gross balance of payments, taking the current and capital accounts together, the document says, lead to a modest increase of Rs 100/150 crores in the country's foreign exchange reserves during the current year, if the world crude oil prices stabilise at reasonable levels. On capital against external assistance net repayment of principal is projected, to rise from Rs 835 crores last year to about Rs 1,140 crores this year. The receipts from tourism, transport and insurance are expected to grow. The level of inward remittances, however, it is thought, would not rise further.

Sharp Rise

About the price level, it is noted in the document that there has been a rather sharp upward movement in the index of wholesale prices since March, 1979, due partly to seasonal factors and partly to adjustments in the prices of manufactures to higher costs, including the incidence of higher taxation. Some measures have been initiated to check the growth of inflationary pressures in the economy, but there is need for continued vigilance, specially in the light of the likely impact of higher world price of crude oil and oil products.

The 1979-80 Plan envisages an outlay of Rs 12,601 crores in the public sector, as compared to the outlay of Rs 11,650 crores for 1978-79. The maintenance expenditure on fifth Plan schemes, which were completed by the end of 1978-79, has been treated as non-Plan for 1979-80 onwards, and is estimated at Rs 805 crores. Taking this into account, the total developmental outlay for 1979-80 compared to the Plan outlay for 1978-79 represents an increase of 16 per cent. The increases are mainly in agriculture and allied services, irrigation and flood control and power sectors.

Rural Oriented: This year's Plan gives considerable importance to the revised minimum needs programmes and rural development (RMVP). The aggregate outlay for RMNP for the states and union territories for 1979-80 is Rs 531.28 crores. This includes the outlays for rural electrification, rural roads, elementary education, adult education, rural health, rural water supply, housing for rural landless labour/householders, environmental improvement of urban slums and nutritional programmes.

The estimated outlay for rural development in the annual Plan is of the order of Rs 5003.41 crores. This comes to 40.13 per cent of the total plan outlay of Rs 12,467.63 crores.

The employment strategy of the current five-year Plan involves adoption of employment intensive sectoral planning, regulation of technological change to protect and enhance employment and promotion of area planning for full employment. Several schemes with high employment potential have been initiated during the sixth Plan period 1978-79 and 1979-80.

An integrated rural development programme, aimed at providing full employment, was initiated in 2,000 blocks already covered by some of the rural development programmes and 300 new blocks were selected for coverage in

TABLE II

Distribution of Gross Domestic Product

(Rs crores at 1976-77 prices)

Sector	1977-78 CSO quick estimates	1978-79 Forecast	1979-80 Preliminary forecast
Agriculture and Allied Services	31372 (10.70)	32332 (3.06)	32907 (1.78)
Mining and Quarrying	1124 (1.90)	1149 (2.22)	1261 (9.75)
Manufacturing	12256 (3.65)	13147 (7.27)	13971 (6.27)
Electricity	1075 (3.66)	1166 (8.47)	1232 (5.66)
Construction	4445 (8.31)	4747 (6.79)	5013 (5.60)
Railways	1138 (3.83)	1127 (—0.97)	1200 (6.48)
Other Transport	2603 (5.17)	2747 (5.53)	2903 (5.68)
Other Services	22434 (5.32)	23438 (4.48)	24594 (4.93)
GDP at Factor Cost	76447 (7.25)	79853 (4.46)†	83081 (4.04)

Figures in brackets indicate growth rate in percentage over previous year.

†The previous estimate of 3.5 per cent which was incorporated in the Economic Survey has now been revised in the light of the fresh data

1978-79. An additional 300 blocks are being taken up in 1979-80. The distribution of one million tonnes of foodgrains in 1978-79 for the food-for-work programme provided 400 million man-days of work. In the current year, it is proposed to utilise 1.5 million tonnes of foodgrains for providing 600 million mandays of work.

The generation of employment as a result of creation of additional irrigation facilities is estimated to be of the order of 0.38 million person-years in 1978-79 and a further 0.35 million person-years in 1979-80.

The other major schemes which are generating considerable employment opportunities include small farmers development agency programme; drought prone areas programme; operation flood for dairy farming; agricultural extension and training programmes; district industries centres; expansion of handloom, khadi and village industries; margin and seed money scheme for encouragement of self-employment, national adult education programme; community health workers' scheme; Maharashtra employment guarantee scheme; stipendiary employment scheme for graduates and diploma-holders in Karnataka; special employment programmes in Andhra Pradesh, Jammu and Kashmir and Punjab, and the additional employment programmes in West Bengal. The assistance provided by commercial banks for encouraging self employment and the help extended by the small industry development organisations are also resulting in the creation of substantial employment opportunities.

TABLE III

Estimated Domestic Savings and Investment by Sectors

(Rs crores at current prices)

Item	1977-78	1978-79	1979-80
		Forecast	Preliminary forecast
Gross Savings	19995	22029	23935
1. Domestic Savings	19993	21292	22700
1.1 Public Sector	3861	3903	4000
	(4.4)	(4.2)	(3.9)
1.2 Private Corporate Sector	1276	1318	1500
	(1.5)	(1.4)	(1.5)
1.3. Household Sector	14856	16071	17200
	(17.1)	(17.2)	(16.9)
2. Foreign Savings	(+) 2	(+) 737	(+) 1235
2.1 Net Import of Goods	(+)1023	(+) 1728	(+) 2285
2.2 Net import of Services	(—)1021	(—) 991	(—) 1050
Investment(=) Investible Fund	19995	22029	23935
1. Public Sector (Gross fixed capital formation)	8336	9538	10387
2. Private Sector	11373	12545	13761
2.1 Private Corporate sector	1769	1991	2229
2.2 Households	9505	10454	11432
2.3 Net Purchase of Physical Assets	99	100	100
3. Others	(+) 286	(—) 54	(—) 213

Note. Figures within brackets denote percentage of GNP.

Agricultural Sector: The total public sector outlay for agriculture and allied sectors and cooperation for 1979-80 is Rs 1815.22 crores, as compared to Rs 1745.16 crores in 1978-79. Sufficient funds have also been provided to promote irrigation and command area development and flood control.

Research Activities

The Plan document indicates that the on-going research activities of the existing agricultural institutions and coordinated projects would be further strengthened by providing full support for infrastructure development and extended support to the agricultural universities to maintain the tompo of research and education activities. Operational research programmes could be given priority to establish and demonstrate the field worthiness of economic viability of new technologies through "Lab-to-Land" programme.

Small Industries: The outlay for the village and small industries sector in 1979-80 is to be of the order of Rs 289.48 crores, as compared to the outlay of Rs 234.45 crores in 1978-79. Some additional funds for the development of these industries would also be made available under the programmes for the hills and tribal areas.

In making provisions for 1979-80 in the village and small industries sector, committed expenditure to the tune of Rs 3.81 crores in the central plan and Rs 9.80 crores in the states' and union territories' plans has been transferred to the non-Plan budget. Taking into account the committed expenditure, the actual step-up in the outlay for annual Plan 1979-80 over the level of 1978-79 is 31 per cent.

Industrial Sector

The Plan for 1979-80 provides an outlay of Rs 2405.81 crores for large industries and minerals in the central sector and Rs 141.29 crores for states and union territories. About 70 per cent of the outlay provided in the central Plan is for iron and steel, petroleum, fertilizers and coal. A sum of Rs 580.23 crores has been provided for oil exploration. production, relining and marketing.

In the large industries sector, adequate provision has been made in the annual Plan for the on-going projects so that these are completed expeditiously and returns accrue on the investments already made. The allocation for the new starts has been made selectively in certain critical areas like fertilisers and cement, which are essential for the economy.

For the transport and communications sector, a total outlay of Rs 2135.61 crores has been made, as compared to the outlay of Rs 1794.23 crores in 1978-79. The outlay for the railways has been stepped up from Rs 535.30 crores to Rs 650 crores; for shipping from Rs 98.72 to Rs 164.73 crores; for civil air transport from Rs 82.50 to Rs 142.26 crores; and for communications from Rs 355.10 crores to Rs 411.09 crores.

The annual Plan for 1979-80

makes a provision of Rs 96.61 crores for urban development programme and Rs 205.19 crores for various housing schemes. Regarding water supply and sanitation, the Plan makes an outlay of Rs 429.52 crores in 1979-80, as compared to Rs 326.68 crores in 1978-79.

In the science and technology sector, the total Plan outlay for 1979-80 is to be to the tune of Rs 242.38 crores, as compared to Rs 223.56 crores in 1978-79. The non-Plan expenditure in the same sector is estimated to be Rs 208.26 crores, as compared to Rs 156.71 crores in 1978-79.

In the field of education, a total outlay of Rs 273.77 crores has been made for 1979-80. The National Adult Education Programme is expected to take care of about 45 lakh additional illiterate adults during the year.

TABLE IV

Production Projections of Industrial Sector

Item	Unit of production	1977-78	1978-79		1979-80
		Actual	Anticipated	Targets	Forecast
Coal	Mill. tonnes	100.8	102	113.5	112
Lignite	,,	3.58	3.4	4.2	4.2
Crude Petroleum	,,	10.76	11.70	12.8	13.15
Iron Ore	,,	40.09	37	39	41
Manganese Ore	,,	1.69	1.5	*	1.65
Sugar†	,,	5.2	6.6	5.5	6.2
Vanaspati	Thou. tonnes	572.2	679.2	600	700
Tea	Mill. Kgs.	560	570	*	580
Cotton Yarn (including blended)	Mill. Kgs.	1149	1230	1140	1300
Cloth (Mill Sector)	Mill. Metres	4148	4240	4200	4300
Jute Manufactures	Thou. Tonnes	1178	1047	1200	1200
Art Silk Fabrics	Mill. Metres	1374	1200	1400	1300
Leather Cloth	,,	15.3	19	*	20
Leather Footwear	Mill. Pairs	13.7	12.0	15	13.5
Paper & Paper Board	Thou. Tonnes	965	1000	1030	1055-1100
Tanned Hides	Thou. Pcs.	2092	2200	*	2300
Automobile Tyres	Mill. Nos.	6.27	7.00	6.8	7.50
Cycle Tyres	Mill. Nos.	28.4	31.8	30.0	32
Nitrogenous Fertilisers	Thou. Tonnes	2013	2163	2250	2600
Phosphatic Fertilisers	,,	670	775	750	850
Caustic Soda	,,	524	561	610	620-638
Soda Ash	,,	573	581	620	625
PVC Resins	,,	59	63	60	56
Synthetic Rubber	,,	28.3	28.1	35	35.1
Nylon Filament Yarn	,,	16.4	18.6	20	20
Polyester Fibre	,,	23.2	25.3	26	25-30
BHC (Tech.)	,,	28.7	35	31	35
Penicillin	MMU	312.3	307.1	327	382
Vitamin A	MMU	50.2	61.6	51	67
Streptomycin	Tonnes	199.9	220.9	230	252
Chloramphenicol	Tonnes	79.5	84	*	100
Soap	Thou. tonnes	306.0	350	300	355
Petroleum Refinery Products	Mill. tonnes	23.22	24.15	25.9	27
Refractories	Thou. tonnes	800	825	840	860
Cement	Mill. tonnes	91.4	19.42	21	22
Pig Iron	,,	9.37	9.33	*	10.5
Mild Steel	,,	7.66	7.79	7.68	8.56
Steel Castings	Thou. tonnes	68.5	76.0	70	80
Transmission Towers	,,	101.8	101	*	105
Structurals	,,	137.3	145	*	155
Steel Pipes-Tubes	,,	520	545	*	570
Cast Iron Spun Pipes	,,	143.3	180	*	200

—*Contd.*

Item	Unit of production	1977-78	1978-79		1979-80
		Actual	Anticipated	Targets	Forecast
Electrical Steel Sheets	Thou. tonnes	35	47	*	50
Aluminium (Virgin Metal)	,,	178.5	213	200	240
Bolts, Nuts and Rivets	,,	26.8	30	*	32
Wire Ropes	,,	26.3	30	*	31
Razor Bladers	Mill. Nos.	1037	1300	*	1430
Forged Hand Tools	Rs. crores	21.04	27	*	30
Welding Electrodes	Milt. R. Mtrs.	524	550	*	600
Boiler	Rs. crores	204.0	214	220	220
Diesel Engine (Stationary)	Thou. Nos.	133.1	138	*	143
Textile Machinery	Rs. crores	143.6	191	150	210
Sugar Machinery	Rs. crores	41	36	55	37
Cement Machinery	Rs. crores	23.1	39.0	24.5	40
Chemical & Pharmaceutical Machinery	Rs. crores	69.54	68.5	75	75
Power Driven Pumps	Thou. Nos.	351.5	370.0	*	389.0
Air & Gas Compressors	Nos.	8480	10100	*	10800
Ball & Roller Bearings	Mill. Nos.	26.5	29	32	33
Machine Tools	Rs. crores	103	132	120	138
Tractors	Thou. Nos.	40.9	54.0	42	57
Typewriters	,,	67	85	70.5	92
Refrigerators	,,	151	180	*	190
Power Transformers	Mill. KVS	16.3	19.75	19	22
Electrical Motors	Mill. H.P.	4.04	4.20	4.3	4.60
Electrical Fans	Thou. Nos.	400	3070	3800	3300
Electric Lamps	Mill. Nos.	168.5	180.3	195	200
Winding Wires	Thous. Tonnes	21.8	27	*	29
VIR & PVC Cables	Mill. Cms.	505	539	550	600
Wire Rods for ACSR	Thou. Tonnes	20.2	24	*	26
Paper Insulated Power Cables	Thou. Metres	2983	3200	*	3450
Storage Batteries	Thou. Nos.	1624	1631	1600	1750
Dry Cells	Mill. Nos.	647.4	879	675	900
Radio Receivers	,,	1.88	1.9	*	1.8
Motor Starters	Thou. Nos.	869	940	*	990
Locomotives	Nos.	201	205	210	214
Railway Coaches	Nos.	1049	1075	1000	1165
Railway Wagons	Thou. Nos	12.3	11.6	13.0	13
Commercial Vehicles	,,	41	58.0	60	60
Cars	,,	34	33.5	40	35
Jeeps	,,	9.14	12.0	10	12.5
Scooters & Mopeds	,,	265	298	310	325
Bicycles	,,	3183	3718	3500	3800
House Service Metres	,,	2011	2500	*	2700
Clocks	,,	212.5	276	*	285
Zip Fasteners	Thou. Metres	1239	1080	*	1000
Electricity	Mill. KWH	98	109	112	117
Railway (Originating Freight Traffic)	Mill. Tonnes	237.3	223	248	248

Note: Where the 1979-80 forecast has been indicated as a range, the lower limit of range has been used in making the GDP forecast and the higher limit is the target for the industry.

* Annual Plan 1978-79 has not set the target for these industries. 1977-78 and 1978-79 data are based on information available upto May 15, 1979.

†Sugar production relates to financial year.

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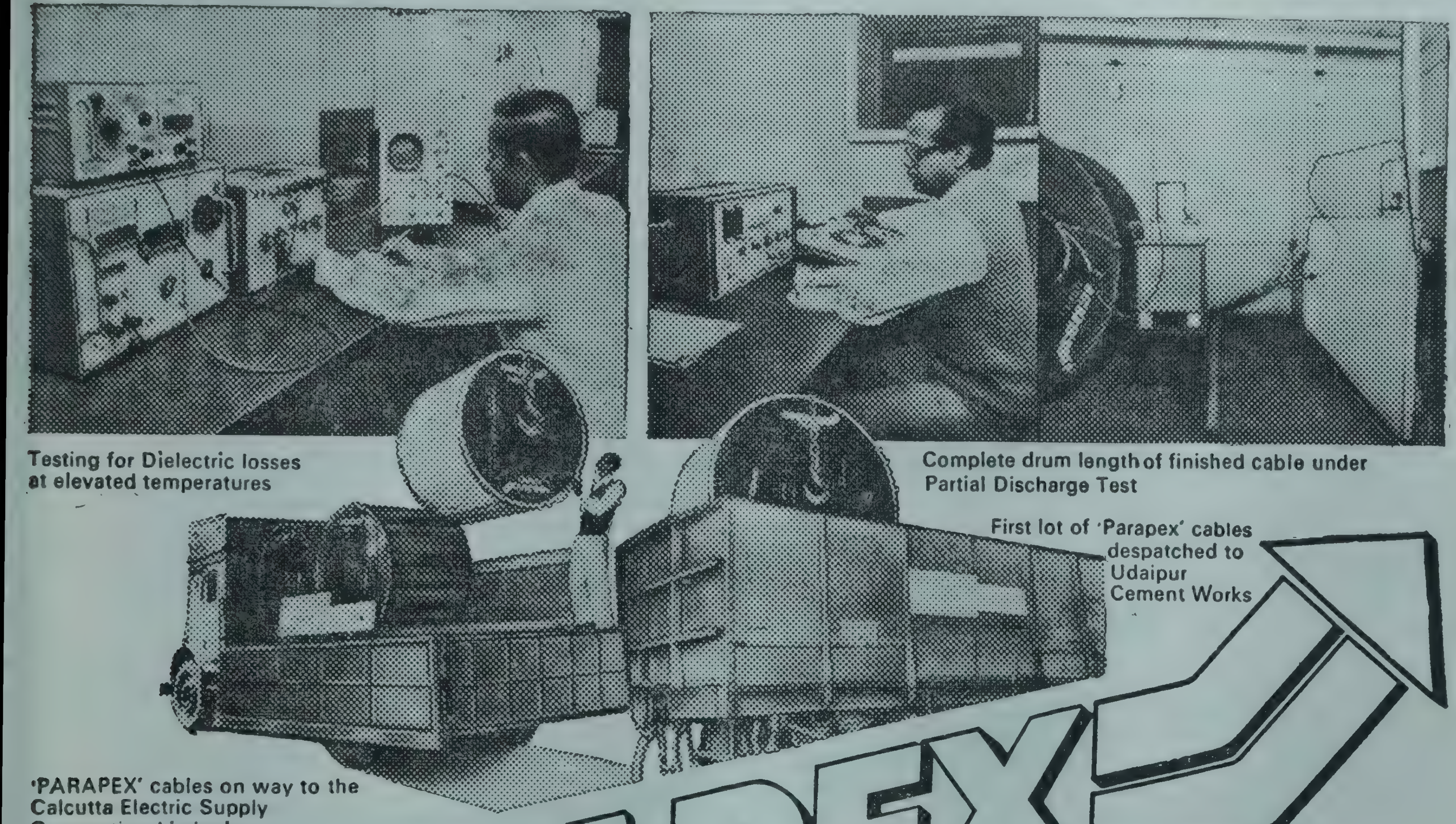

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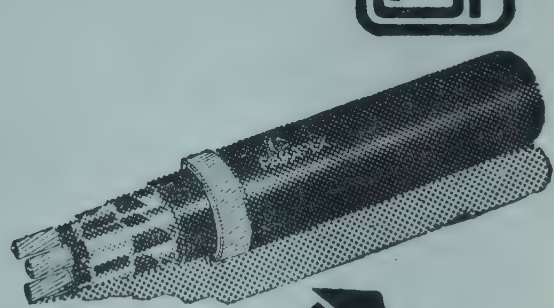

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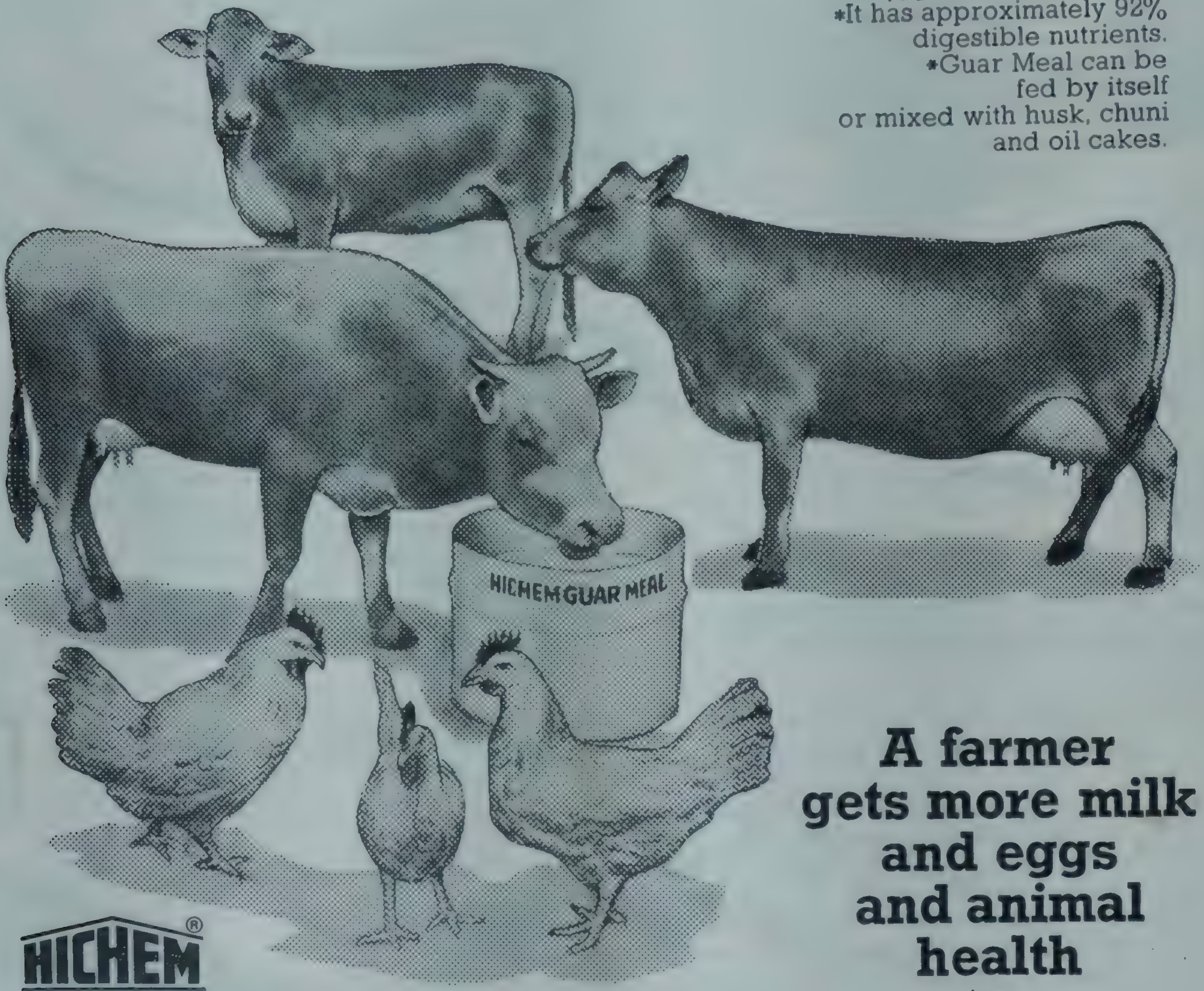

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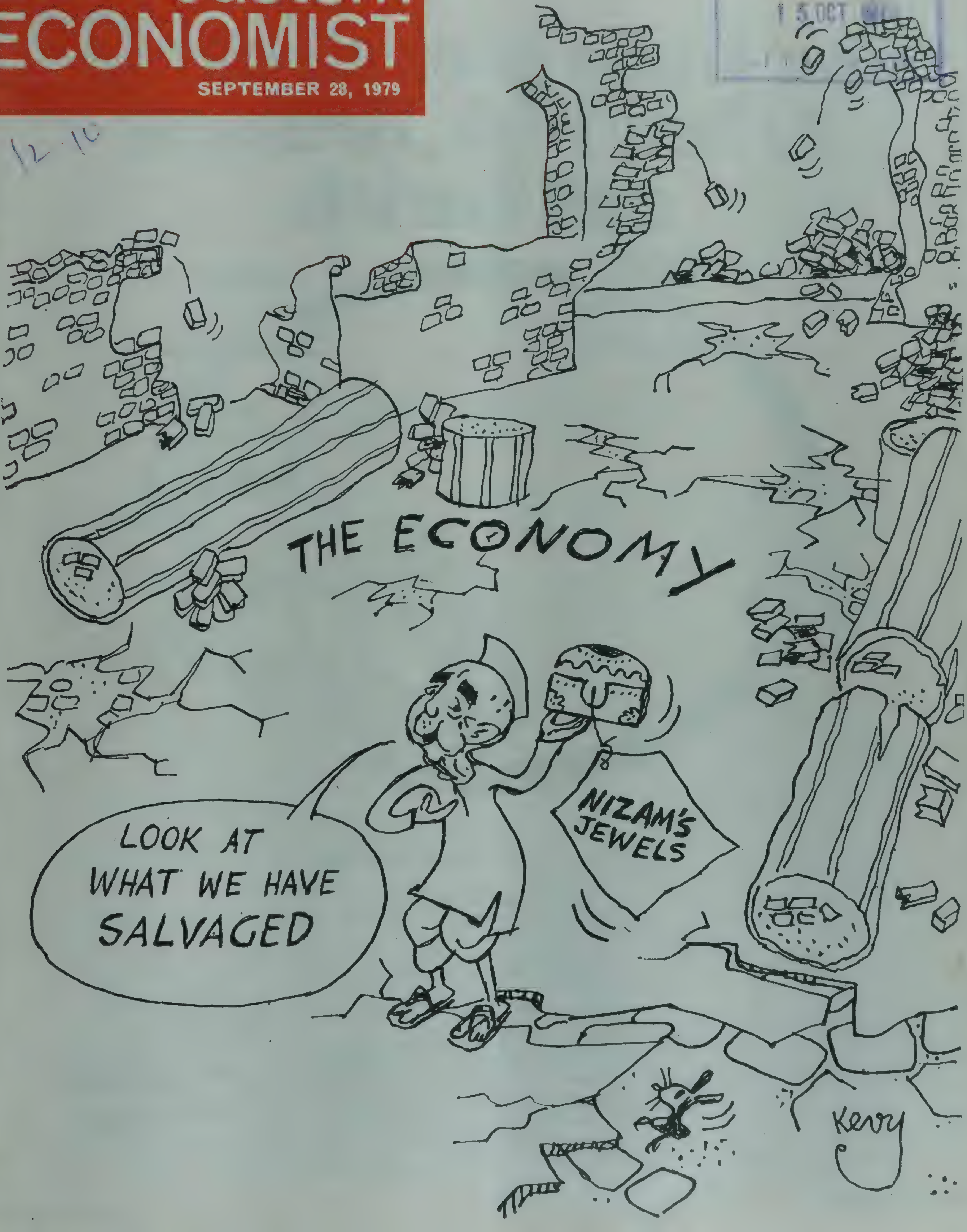
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Price politics

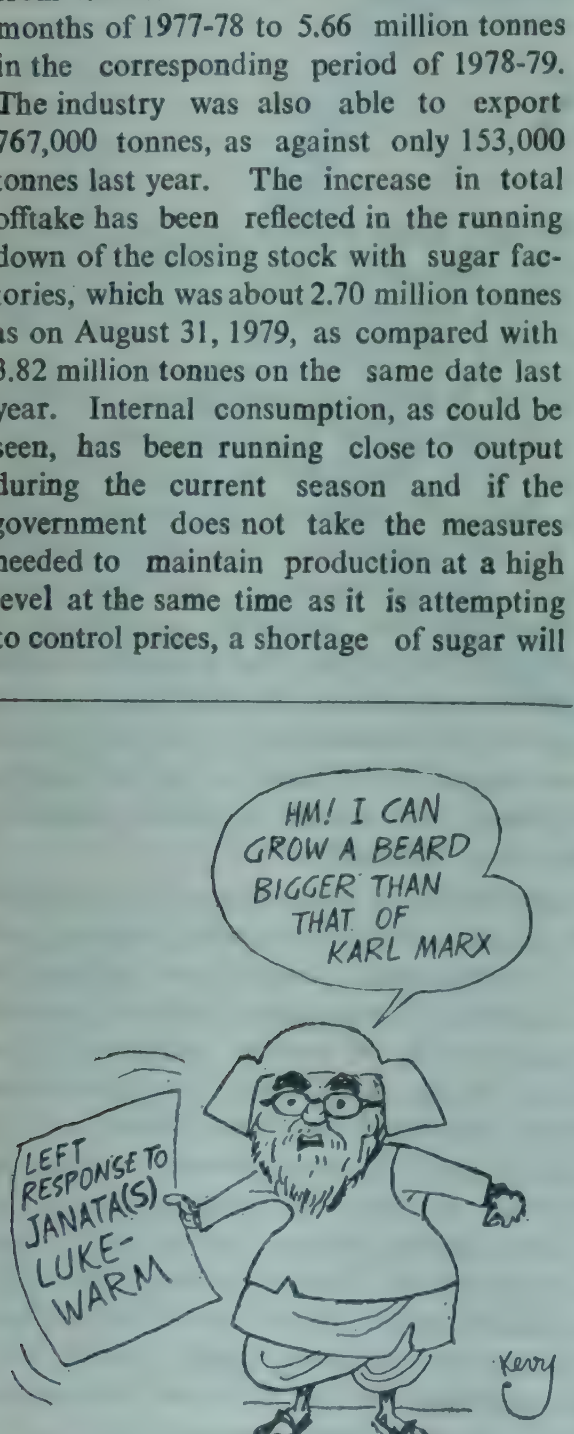
Mr Charan Singh seems to be dividing his time between defending himself against accusations or complaints that the budget he produced when he was Finance minister in the Janata government had released a new wave of inflation and taking counsel with his colleagues and officials on measures for checking the rise in price level. Not unnaturally populist decisions seem to be at a premium. The cabinet is reported to be thinking of strengthening the legal instruments available to it for dealing with hoarding, profiteering and black marketing. Among the proposals which the government evidently wants to adopt is the setting up of special courts for trying economic offenders. About 25,000 cases, it is being suggested, could come under the purview of these courts. The state governments are being urged to make full use of the Essential Commodities Act to deal with selling agents, stockists and wholesale and retail traders, who may be indulging in malpractices.

Effective resort to punitive legal action to discourage hoarding and profiteering is clearly to be greatly preferred to statutory fixation of manufacturers prices. The prescription of ex-factory prices not only leads almost automatically to the generation of black money but becomes widely irrelevant to consumer interests because of the manipulation of supplies all along the channels of distribution. The crux of the problem therefore is the effective policing of trade stocks through the enforcement of the Essential Commodities Act. If only state governments or other concerned authorities could or would display sufficient efficiency in this area, the statutory control of manufacturers prices, which is essentially a disincentive to higher production, could be dispensed with. As for the special courts, they are unlikely to be of much assistance to the government in controlling inflation or its consequences. Even their demagogic utility for the caretaker administration cannot be taken for granted. Quite possibly the Charan-Chavan ministry will incur the odium of the business community, which is not numerically insignificant, and has clearly considerable influence as a constituent especially of the urban electorate.

Meanwhile, the control imposed on sugar prices is creating problems not only for the industry but also for consumers, cane-growers and the government. It is possible, of course, for the authorities to ensure that retail prices do not exceed rupees three per kg in the states and bigger towns even during the festival season. By effecting adequate releases of sugar and enforcing the Essential Commodities Act vigorously, profiteering by the trade could be curbed to this extent, but it is not so certain that sugar will be available to consumers in small towns and the rural areas in an adequate and regular flow or at fair prices. Ultimately, what would matter is the degree of success that the government and the industry could jointly achieve in maintaining output at as high a level as possible.

The drought-damage suffered by the cane crop, especially in western UP, may affect sugar output to an extent, but the position could still be retrieved given cooperation between the government and the industry. Unfortunately, political considerations seem to be weighing with the central and state governments and, even as factories are complaining of unremunerative statutory prices, regional political bosses have started bullying the industry to give higher prices to cane-growers. In the absence of reasonable profit margins, the industry will have no incentive to operate a long crushing season by starting early or maximising production generally. The government, therefore, cannot afford to deal with the sugar situation on an *ad hoc* basis. It must coordinate cane prices, ex-factory sugar prices, trade margins and retail prices of sugar in a rational and fair manner. Otherwise it will fail consumers and cane-growers, both of whom stand to suffer if the adverse impact of some decline in the cane crop on sugar output is made worse by politically motivated or otherwise wrong government policies.

Even during the current season, about to end, sugar output has shown, some decline as foreseen by the industry, which warned the government exactly of such an outcome when sugar prices slumped after decontrol last year and political pressure was brought to bear on the industry to pay higher prices for cane. In the first eleven months of the 1978-79 season, output amounted to 5.84 million tonnes, as against 6.42 million tonnes during the corresponding period of last year. Internal consumption, however, went up from 4.02 million tonnes in the first eleven months of 1977-78 to 5.66 million tonnes in the corresponding period of 1978-79. The industry was also able to export 767,000 tonnes, as against only 153,000 tonnes last year. The increase in total offtake has been reflected in the running down of the closing stock with sugar factories, which was about 2.70 million tonnes as on August 31, 1979, as compared with 3.82 million tonnes on the same date last year. Internal consumption, as could be seen, has been running close to output during the current season and if the government does not take the measures needed to maintain production at a high level at the same time as it is attempting to control prices, a shortage of sugar will be difficult to avoid in the course of the 1979-80 season.


HM! I CAN GROW A BEARD BIGGER THAN THAT OF KARL MARX
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Kerry

Sugar is officially classified as a "sensitive" commodity. So also are edible oils. The government's effort to arrest the sharp increase in the prices of these essential articles of daily consumption have not been successful, partly because the policy of canalising the import of edible oils through the State Trading Corporation has proved useless from the point of view of eliminating or even reducing speculative activity in the domestic market.

profitability problems

The vanaspati industry, plagued by unrealistic price controls, has had difficult profitability problems to cope within processing a mix of imported and domestic vegetable oils. The vanaspati factories have also had to cut their operations because of power cuts. However, the minister for Commerce and Civil Supplies, Mr Hitendra Desai, it is claimed, has just been able to persuade the state governments in UP, Punjab, Rajasthan and Haryana not to suspend power supplies to vanaspati units. Perhaps by permitting the trade to import edible oils under OGL, side by side with the STC, the government could succeed in breaking the scarcity psychology, which the hoarders and profiteers are taking advantage of. But, then, the authorities do not seem to have enough confidence in themselves, in the sense that they have their own doubts about the effective enforcement of the Essential Commodities Act by the state governments or other concerned administrations.

The caretaker government's anti-inflationary fervour seems to be much less intense in the case of the prices at foodgrains than in its dealings with the sugar and vanaspati industries. The cabinet has fixed a support price for paddy of common varieties at Rs 95 per quintal for the marketing season 1979-80. The support price for coarse grains has also been fixed at the same level. In both cases this marks an increase of Rs 10 per quintal over the support price applicable for 1979-80. The prices now notified are higher than those recommended by the Agricultural Prices Commission. That body has proposed that procurement prices for paddy should be raised by rupees five to Rs 90 per quintal, while those for coarse grains should stay put at Rs 85 per quintal. The government is yet to decide whether any part of the increases in procurement prices should be passed on to the consumers served by the public distribution system; this will have to be discussed between the centre and the state governments. In any event, whether prices in the fair price shops are raised or not, the higher procurement prices for the kharif grains will certainly contribute to the further firming up of foodgrain prices in the open market and will also strengthen the case of the farm lobby for increases when the time comes, in the prices of rabi crops.

Indo-Nepal relations

THE NEPALESE king is always a welcome visitor to this country, for Indo-Nepalese relations are built on immutable bonds of shared history, geography, culture and above all mutuality of interests. Though unofficial, the last week's visit of King Birendra and Queen Aishwariya—occasioned by their return journey to Kathmandu from the Havana summit—was taken advantage of by both the sides for an exchange of views on bilateral matters as well on the political developments that have taken place in the neighbouring countries in the recent months.

As a result of the increased visits by the Indian and Nepalese dignatories to each other's country, the traditional cordial relations between the two have been strengthened a great deal further, with most of the minor irritants, which had developed on account of such factors as the provision of transit facilities for Nepal's external trade through India, have been straightened out. The Nepal King and the Indian prime minister, Mr Charan Singh, thus, expressed a good deal of satisfaction over the present state of Indo-Nepalese relations based on mutual respect and equality, with India trying to assist to the utmost the economic development of Nepal.

King Birendra is understood to have

stressed upon the Indian authorities that the various developmental projects assisted by India, which are currently under implementation in Nepal, should be expedited and those which were still at the blueprint stage ought to be taken up speedily. The former include the Rs 25 crores Devighat hydel project on the Trishuli river on which construction was taken up in 1978, the setting up of a cement plant at Udaipur in the tarai area of Nepal and the laying of railway line from there to the nearest road-head. There are also several road building projects under implementation in Nepal.

Among the new schemes in respect of which King Birendra urged speedy action are included the giant Rs 1,500 crores Karnali project on Ghagra, which will produce electricity to the extent of 3,600/4,500 MWs and several joint schemes to control floods and prevent soil erosion. India has already assisted Nepal, till the end of the last financial year, to the tune of nearly Rs 156 crores, besides providing technical assistance for building up the Nepalese economy otherwise. The projects envisaged to be taken up in the near future will surely augment this assistance a great deal. The flood control and soil erosion schemes as well as the Karnali project involve India's own interests. The waters flowing down from Nepal recurringly ravage crops in the neighbouring Indian states because of annual floods.

political unrest

In regard to the political situation in the neighbouring countries, King Birendra is understood to have conveyed to the government of India his concern over the alleged Soviet activity not only in the neighbouring countries but also in his own country. The Russian sources, he is said to have alleged, were encouraging agitations against his government, especially after the recent developments in Afghanistan, Vietnam and Kampuchea. Nepal probably fears a similar Russian-sponsored turmoil, which might induce China to take a more active interest in Nepalese affairs. This could be a source of anxiety to India itself. He appraised the Indian authorities of the steps he was taking to give full opportunities to democratic forces in his country and sought their cooperation for containing the free movement of Naxalites and CPI(M) activists between India and Nepal. He complained that these elements were often engaged in undesirable activities in his country. India's stand on this issue has been that there is not much that this country can do to check free movement across the border of people on whom this country's democratic system does not impose any restrictions. The best way of dealing with such elements is to restore democratic freedoms as far as possible in Nepal and to devote greater attention to the economic upliftment of the Nepalese.

Rural electrification: the task ahead

OF MUCH greater significance than its wholesome achievements so far is the task which the Rural Electrification Corporation (REC) has set before itself for the coming years. With about 340,000 villages in the country still to be electrified—by the tenth year of REC's operations ending March 31, 1979, over 220,000 had been put on the electricity map, approximately 30 per cent with its own assistance—the corporation is not only stepping up its activities in respect of the electrification of new villages but also in regard to the intensification of power use in the villages already electrified. The need for the latter is keenly felt with a view to bringing down substantially the transmission losses and thefts in the rural areas which currently average between 30 and 40 per cent, as against the national average of 19.8 per cent. These losses are estimated annually around 450 MWs of power. Such a collosal wastage of energy obviously cannot be continued.

The Planning Commission has been asked to allocate approximately Rs 100 crores per annum on the system development in energy in the countryside, the cost being shared by the REC and the state governments on a 50 : 50 basis. The World Bank is also stated to have shown interest in assisting this programme. Its contribution will follow when it extends its new credit for rural electrification after 1982. As a first step towards improving the rural power system, bigger sized conductors are being laid which would minimise power losses. Second, capacitors are being installed, both at the transmission stations and sub-stations and at consumer ends. As the rural consumers are reluctant to incur extra cost on installing such capacitors, it is proposed to make them a part of the elecrification service. Like meters, the state electricity boards would provide these capacitors on a nominal rental.

An ambitious rural electrification programme has already been launched by the REC in terms of the current Plan's targets of electrifying 100,000 villages and energising 20 lakh agricultural pumpsets during the five years to March 31, 1983. Over 36 lakh pumpsets had been energised in the country by the end of March 31, 1979, out of a total potential of about 120 lakh pumpsets. As many as 413,000 pumpsets had been energised under the REC programmes alone. The recent rise in the tempo of REC's activities is reflected in the proportion of the villages electrified under its programmes going up from about 22 per cent of the total villages electrified during the fourth Plan (1969 to 1974) to over 60 per cent during the last year. The proportion of pumpsets energised under the projects financed by the REC increased during this period from just five per cent to 32 per cent.

new projects

Last year the corporation approved 640 new projects for proving electricity in selected rural ares which envisaged electrification of 27,000 additional villages and energisation of 248,000 agricultural pumpsets. Besides 11 projects for the construction of high tension transmission lines and connected sub-stations, 57 projects for the improvement of system to reduce line losses, seven proposals for setting up linemen training centres and two proposals for putting up workshops for repair of damaged transformers were approved. Under the special project agriculture programme, being implemented in collaboration with commercial banks, 226 projects envisaging energisation of 120,000 agricultural pumpsets were approved. With the financial assistance provided by the corporation, electricity was extended to nearly 9,000 additional villages and 94,000 agricultural pumpsets were energised. On an average, every hour last year saw a new village electrified and 10 agricultural pumpsets energised, besides the provision of service connections in respect of the small industries, domestic and commercial consumers and street lighting.

financial assistance

The corporation sanctioned last year a total financial assistance of Rs 231 crores. and disbursed Rs 156 crores. The aggregate of the loans sanctioned by the end of last year had exceeded the Rs 1,000 crore mark; it amounted to Rs 1,031 crores for 2,731 projects. The actual disbursement till then had been of the order of Rs 673 crores.

During the current financial year, 72 new projects, involving financial assistance to the tune of Rs 23.42 crores, had been sanctioned upto August 31, aiming at electrifying 3,719 new villages and intensive electrification of 1,600 villages already electrified and provision of service connections to 23,921 agricultural pumpsets, besides 2,912 small industries, 59,478 domestic/commercial connections and 14,309 street lights. Some 1,700 projects costing around Rs 550 crores are under implementation.

The programme is being stepped up thanks to the assistance of $175 million received recently from the International Development Agency and $58 million from USAID (for the electrification of backward areas). That the corporation is laying a good deal of emphasis on the electrification of backward areas is adequately reflected in the fact that of the 2,731 projects approved by it up to March 31, 1979, over 1,400 projects had been sanctioned for these areas, involving financial assistance of the order of Rs 629 crores—61 per cent of the total sanctions by the corporation. Out of the total 139,000 villages proposed to be electrified under the REC programmes, more than 100,000 villages, representing 76 per cent of the total, are to be electrified in the backward and under-developed areas.

In response to the changing pattern of demand of electricity in different areas, the corporation has also introduced new categories of loan for projects to extend electricity to wells and tubewells for supplying drinking water in the rural areas and also to cover the left-out villages in REC scheme areas. Further, liberalisation has been effected in the terms and conditions of loans for rural electrification projects under the revised minimum needs programme.

The REC has also undertaken consultancy projects abroad. It has entered into an agreement with SONELGAZ, Algeria's national agency for the distribution of electricity and gas, to provide technical assistance to that country in the implementation of rural electrification projects. It has also agreed to provide assistance to Egypt in the procurement of equipment and materials for the rural electrification programmes in some selected areas of that country. Another agreement with Egypt envisages provision by the REC facilities for training the engineers of the electricity authority of Egypt in rural electrification and assistance in evolving standard specifications for equipment and materials for that country's rural electrification works. At the request of the Economic and Social Commission for Asia and the Pacific (ESCAP), the REC has prepared a report giving the details of the Indian experience which can serve as a possible model for the other countries in the region.

Financially, the performance of the REC has been quite encouraging last year. Its working yielded a surplus of Rs 8.45 crores during the year, as against Rs 7.93 crores in the previous year. A good deal of economy was effected in administrative expenditure, which in relation to the total earnings declined to 5.92 per cent from 7.4 per cent in 1977-78. The net profit after providing for tax amounted to Rs 4.56 crores, as against Rs 4.28 crores in the previous year. Dividend has been declared at the rate of Rs 10 per share of Rs 1,000.

South India's power outlook

THE DISTURBING observation was made by the central minister for Energy, Mr K.C. Pant, at the conference of Electricity ministers of the southern region in Madras recently, that there had been a sharp decline in the utilisation of thermal capacity. The deterioration in operating efficiency has effected seriously the availability of power in the region when the calculations of the state electricity boards have been upset by a wayward monsoon.

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In 1976-77, the average for the four states was 57.1 per cent against the average of 55.8 per cent for the country as a whole. In the subsequent year, the operating ratio declined to 47.5 per cent and further to 43.3 per cent in 1978-79. There was also a drop in the all-India average to 48.6 per cent in the same period. But the dip in the ratio of the southern states has been alarming. The commissioning of additional capacity with the erection of generating sets supplied by Bharat Heavy Electricals and fitful coal supplies have pulled down the average, though the Neyveli Lignite Corporation had its own special problems.

serious bottlenecks

The mining operations at Neyveli have encounterd serious bottlenecks with frequent breakdowns of the bucket wheel excavators. In the summer months of this year particularly, generation could not be maintained at the promised levels because of delays in clearing overburden and mining lignite. The confident assertion has been made by the corporation authorities that there would be a pronounced increase in lignite raisings after November with the commissioning of new equipment and the completion of the second phase of rehabilitation. Unlike at the Ennore and Kothagudam thermal stations, Neyveli has no difficulty in operating its generating sets as they have functioned on occasions even in excess of rated capacity. At Ennore, the modifications and adjustments to the existing sets have been helpful in preventing breakdowns. But the units cannot be run at greater capacity for technical reasons and as a measure of abundant caution only 85 per cent of the capacity of each set is used when there are no bottlenecks. It is contended that this disability has been mainly responsible for an operating ratio which is lower than the national average.

The thermal capacity of Andhra Pradesh and Tamil Nadu is as high as 2,150 MW. There are no thermal stations now in Kerala and Karnataka. A drop of 10 per cent in the operating ratio means the loss of capacity of over 200 MW or nearly 1,200 million units annually. While it can be expected that Neyveli would acquit itself more creditably in the coming years, it is imperative to ensure that the thermal stations at Ramagundam, Vijayawada, Tuticorin, Ennore and Basin Bridge would make their due contribution to power availability. With another giant unit at Tuticorin scheduled to be on bars before March, 1980, and the commissioning of the first unit at Vijayawada having a similar capacity in October, the full benefit of fresh investment can be secured only if earlier mistakes are not repeated. It is heartening to note in this context that close cooperation between BHEL officials and engineers of the Tamil Nadu Electricity Board has enabled the speedy erection of the first unit at Tuticorin and its smooth operation. The output of this unit of 210 MW, the first to operate in the southern region, is being slowly raised and it is hoped before long the rated capacity will be achieved.

There are immediately no problems relating to coal supplies. But shortages will emerge when generation is stepped up at both Ennore and Tuticorin. The requirements of the latter centre have obviously to be imported by sea. But the state's electricity minister felt so exasperated over the delays in getting coal by ships from Haldia that he instructed the electricity board officials to examine the possibilities of securing coal from Australia ! This bottleneck in the movement of coal is proposed to be remedied with the railway officials giving the necessary cooperation for transporting coal to Haldia. The regular movement by sea thereafter will be ensured by new ships that are proposed to be acquired.

Andhra Pradesh, of course, has no dearth of coal supplies as the thermal stations are located at the pit heads or near the collieries. Since there is a large content of thermal capacity in the total and two units are due to be erected at Vijayawada, the defects experienced at Kothagudam should be eliminated. Simultaneously, transmission losses also should be minimised as the proportion is higher in Andhra Pradesh than the all-India average. The distribution facilities also have to be considerably augmented as serious bottlenecks in distribution may emerge when large hydel and thermal capacity is commissioned in 1980-82. The shortfall in thermal generation and the failure of the monsoons in the state have

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IN THE NATION 635-641
Price Politics
Indo-Nepal Relations
Rural Electrification : The Task Ahead
South India's Power Outlook
West Bengal : Anarchy in Power
Orissa : Unprecedented Drought

WINDOW ON THE WORLD 643-648
Oil Prices : Guilty or No ?
The Puerto Rican Debate
World Economy : The Uncertain Future
World Milk Output
Egypt's Silver Thread
Korea : Industrial Growth, Exports

MOVING FINGER 649

ECONOMIC ANALYSIS 650
Inter-Industry Flows : A Profile of Interdependence —*T. Chakravarty*

POINT OF VIEW
British Trade Unions in the Dock —*V.R. Bhatt* 656
Public Enterprises : A Case for Professional Management —*Dr S.P. Vijaya Saradhi* and *A. Shankaraiah* 660

TRADE WINDS 664

COMPANY MEETINGS
Calcutta Electric Supply Corporation (India) Ltd. 669
ITC Ltd. 670

COMPANY AFFAIRS 673

RECORDS & STATISTICS
Current Statistics 676

necessitated a power cut of 30 per cent for HT consumers. The hydel stations in the Sileru basin have not been functioning at the desired level because of the extremely low storage in the reservoirs. The situation may improve with the onset of north-east monsoon at the end of October and the commissioning of the first unit at the Vijayawada thermal station and the first reversible turbine under the Nagarjunasagar pumped storage scheme. But the fact remains that Andhra Pradesh is temporarily deficit while not long ago it exported power to West Bengal through Orissa.

In Karnataka, there is apprehension that the power cut will have to be raised further shortly from the beginning of October. There has already been an increase in the cut to 44 per cent from 33⅓ per cent. The erratic behaviour of the monsoons has been responsible for reduced inflow into the Linganamakki reservoir of the Sharavathy project in recent weeks. In the earlier phase of the monsoons hopes were raised that the reservoir may again get filled up fully as in 1978-79. But these hopes have not materialised. The snags experienced in commissioning the Kalinadhi project have also been responsible for an enlargement of the deficit. The improvement in power availability in Karnataka, if any, in the coming months can come about only with some contribution from Kalinadhi and a larger export from Kerala.

transmission problems

The bottleneck in getting supplies from Kerala is due to the delay in constructing a second transmission line linking Idukki with Karnataka. There can of course, be a pooling of the transmission facilities of Tamil Nadu and Karnataka for exporting the surplus of Kerala. But the absense of an agreement between Tamil Nadu and Karnataka on the quantum of supply and rate, is a stumbling block. Tamil Nadu is quite comfortable at the moment with the hydel storage at a highly satisfactory level. But in the summer months, Kerala will have to come to the rescue unless the second unit at Tuticorin can be completed and commissioned expeditiously. The immediate task, of course relates to the toning up of thermal generation and the speedy completion of new projects. The pooling of generation on a regional basis has also to be done even more effectively than now. In that event 1980-81 may not witness the difficulties that are being experienced as greater benefit will be derived from new large hydel and thermal capacity.

West Bengal : anarchy in power

Mr Jyoti Basu recently told the West Bengal Assembly that trade union rivalry did not affect the generation of power. But a few days later, the West Bengal State Electricity Board Employees' Union and five other unions called for a 48-hour strike to press their demands for revision of pay scales, withdrawal of all retrenchment and suspension orders, cancellation of transfers, and higher bonus. These unions struck work, according to their programme, from 6 a.m. on September 11 and claimed that it was a success. Mr Basu, however, said that the strike did not have any impact on generation. Even if this were true, it does reveal a state of affairs which should cause considerable concern to all those who are interested in West Bengal's welfare. For the last two years in particular, West Bengal has been passing through a grave power crisis which has done tremendous harm to its economy and shattered the prospects of its revival. The fact that at this juncture a sizable section of workers should resort to the weapon of strike to get their grievances redressed indicates surely that the government has been lacking in firmness and tact in dealing with this major problem.

The chief minister has disclosed that though there have been a few cases of sabotage in the power plants, the government has not taken action against the culprits since they could not be identified. The reason for this inaction, however, seems to be the fear that punishment of the saboteurs might create more labour trouble and aggravate the power shortage. But then how long is the government going to tolerate a situation where the crucial power sector remains paralysed because of the deliberate disruption caused by inter-union rivalry and other causes?

Industrial associations have again drawn the attention of the government of West Bengal to the serious consequences of the severe shortage of power. A delegation of the Association of Indian Engineering Industry told Mr Jyoti Basu a few days ago that the engineering industry, which employed about 500,000 persons, might be forced to lay-off workers on a large scale if the supply of power did not improve in the near future. The industry is engaged mainly in the manufacture of wagons, motor vehicles, transmission lines, cranes, wire ropes, cables and other products. The association's suggestions included a ban on the use of air-conditioners, delinking non-essential consumers from the more essential ones and strict observance of the existing orders on the consumption of electricity. But these proposals will have the desired effect only if the power plants work with reasonable efficiency and generation is not disrupted by indiscipline and agitation in various forms.

chaotic situation

Why has the Association of Indian Engineering Industry not focussed attention on the chaotic situation in the labour relations in the power plants? Its proposal to send a task force of experts to examine the defects of these plants did not materialise for reasons which are well known. But even if the task force had been allowed to do its task, would it really have helped to improve the power situation? Unless the association goes to the root of the trouble and fearlessly exposes the rot that has set in, it cannot hope to solve this problem.

The plight of organised industry due to the power shortage has been widely publicised, but not the acute hardship experienced by thousands of petty shopkeepers, small businessmen and self-employed persons. For them, the denial of power has resulted in severe financial loss at a time when the level of prices has been increasing sharply. The situation is expected to show some improvement during the next few weeks, but this will be brought about not so much by better generation as by lower demand, caused by the closure of officies and factories during the Puja holidays. It is feared that after the festival season is over, power supply may again deteriorate. In the winter months of last year, Calcutta continued to experience prolonged power cuts and there is no indication yet that this year the availability will improve.

West Bengal's Finance minister, Dr Ashok Mitra, has said that at present there is no government worth the name in New Delhi and that there is financial anarchy. But West Bengal has a stable government which claims to enjoy the overwhelming support of the people, especially the working class. Why then this anarchy in this vital sector of power?

Orissa: unprecedented drought

It is rather ironical that despite the severe drought that has affected Orissa this year, the state government has been slow in tackling the situation. Till the third week of August, no concrete action appeared to have been taken to ameliorate the distress caused or even to save the hit crops. It was only on August 22—two days after the central aid to the eastern and north-eastern states for combating drought was publicised—that the state cabinet held an emergency meeting to review the situation and see whether the central government could be approached for assistance. The reports current in Bhubaneswar that the state government had failed to submit a report to the centre on the drought situation in its jurisdiction in time, though unauthenticated, do not seem to be without basis, for it is inconceivable that a high-powered committee of the centre, which undertook an on-the-spot assessment of the crop situation in the other states of the eastern and north-eastern areas, would not have done a similar exercise had the state government asked for help from centre.

The central government is reported to have made available nearly Rs 20 crores, on the basis of the above assessment, to help the state of West Bengal (Rs 10.25 crores), Assam (Rs 4.61 crores), Manipur (Rs 2.62 crores), Tripura (Rs 1.21 crores), Meghalaya (Rs 72.32 lakhs) and Nagaland (Rs 60 lakhs). No assistance has been announced for Orissa as yet. The state government has only recently submitted a memorandum to the centre seeking assistance to the tune of Rs 100 crores—Rs 30 crores in the form of foodgrains (wheat and rice) and Rs 70 crores in cash. The decision of the centre on this request is awaited.

The latest reports, however, suggest that the drought this year has been unprecedented—even worse than the 1967 widespread drought. The isolated showers in some parts of the state a few days ago have failed to revive the standing crops, because in most areas either the precipitation has been too low to rejuvenate the withering plants or the crops have already been nearly destroyed.

The information available with the state government upto September 11 indicated that out of the 3,830 panchayat areas in Orissa, as many as 3,250 such areas and 21 NACs and two municipal blocks had been hit by the drought. The crops had been damaged to the extent of 75 per cent or above in as many as 227 panchayat areas, between 50 and 75 per cent in 1,285 such areas and between 25 and 50 per cent in 1,328 panchayat jurisdictions. All the 13 districts in the state had been affected in varying degrees, but the loss to crop of more than 75 per cent had been in 73 panchayat areas in Bolangir, 61 in Sambalpur, 31 in Koraput, 19 in Ganjam, 16 in Dhenkanal, five in Sundergarh and four in Keonjahar.

It is feared that even the rabi sowings, which are to be taken up next month, will be jeopardised if adequate rainfall is not received in the next few days.

Though belatedly, the state government has now devised a two-point strategy to meet the situation. First, it is to make available on subsidised basis for irrigation purposes nearly 1,600 disel pumpsets it has, the subsidy to be provided being 75 per cent. The remainder 25 per cent cost will have to be borne by farmers. The government will also electrify the private wells at its own cost. The state has at its disposal at present eight crores rupees for meeting natural calamities. A some of Rs 5 crores out of this is proposed to be spent on speeding up the implementation of irrigation programmes. Second, the nutrition programme is to be expanded and the food-for-works scheme is to be taken up more vigorously. The decision on declaring the drought-affected areas as famine areas may also be expected soon.

The Hirakud dam is proposed to be shut down totally for power generation with a view to conserving water in the reservoir for irrigation purposes.

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Oil prices: guilty or no?

IT WAS all very well for GATT, in its latest annual report, "International Trade 1978-79," to have accused Western governments of pursuing illfounded economic policies resulting in a new wave of inflation and unemployment in their economies. The report, no doubt, had a point when it argued that recent oil price increases could not be blamed for these ills of the industrial economies, but this was valid only to the extent that the criticism of or complaint against the OPEC had been excessive among affluent oil-importing countries. It cannot be pleaded, surely, that the increases in oil prices have not complicated further the tasks of Western governments in combating stagflation, especially in the context of certain dominant political trends. To affirm, as the GATT does, that the oil price increases could have inflationary consequences only if monetary policy "fails to guard adequately against them" is not very helpful.

The GATT report contends that higher oil prices need not necessarily deflate demand in the importing countries. Since a given amount of imported petroleum has now to be exchanged for more exports, it is open to importing countries, says the report, to curtail domestic spending and release goods and services to meet the additional export demand from the petroleum supplying countries. The snag in this reasoning is that the recycling of petrodollars—assuming that the US currency could still be a standard of reference—is proving more and more complicated. The OPEC countries, thanks to the oil price increases, are not only earning more foreign currencies, but are also earning them faster than they can spend them on their own purchases of goods and services from the rest of the world. This is due in part to the trade in sophisticated weapon systems and nuclear power stations having slumped for the time being. Simultaneously some of the developing countries such as South Korea and India are offering increasingly effective competition to Western countries in bids for construction or other contracts in many of the petroleum supplying countries.

Above everything else, governments and big money-men in oil-exporting countries are becoming more and more inclined to hedge against currency uncertainties generally and, in particular, a weak dollar, which, incidentally, slumped to 220.40 yen in Tokyo on September 21, amidst rumours of a heavy seller trying to dispose of 500 million dollars in US markets. Hence they are holding more and more of the accretions to their capital in the form of such assets as gold, which are not exactly relevant to demand management policies needed for the health of Western economies. On the contrary, the continuous rise in the price of gold, for instance, is boosting monetary reserves and consequently increasing international liquidity to an embarrassing extent. If the gold boom continues in anything like its present strength (the price was up at $380 in London on September 20), governments in a number of countries may be tempted by the gains to their balance of payments to conclude that they need not officiously try to pursue stringent monetary policies simply in order to improve their balance of trade. In this sense the increases in oil prices are not really neutral to the sound management of demand in the oil-consuming countries.

The Bank for International Settlements, at its regular monthly meeting held in the second week of September, discussed aspects of this situation. The increase of well over $100 an ounce in the price of gold since the beginning of this year has pushed up the market value of the official gold holdings of all countries reporting to the IMF to around $ 310 billion. This marks an increase of over 20 per cent since June, and this compares with these countries' total foreign exchange holdings of $ 300 billion, a figure which itself has roughly doubled over the last four years. With the EEC countries owning 40 per cent of the world's monetary gold, the impact of the rise in gold prices on the monetary reserves could lend a new dimension to the problems these countries face in cop-ing with inflationary pressures or risks of unemployment stresses or strains.

GATT's views on the significance of higher oil prices for the problems of Western economies is not shared by the International Monetary Fund which, in its latest annual report, released on September 16, has suggested that the industrial countries may suffer steeper declines in economic output as a result of the rising cost of oil. According to this survey, the increase in oil prices of about $20.50 a barrel, up 60 per cent since the beginning of the year, could add some $75 billion to the import bill of oil-importing nations on the basis of the volume of oil shipments entering into world trade in 1978. The IMF has also expressed the view that, as a result of OPEC price increases, the industrial countries will have to forego two-thirds to three-fourths of one per cent in real economic growth that they would otherwise have achieved.

moderate decline

At the beginning of 1979, the total output in the industrial countries was expected to decline only moderately below the four per cent growth rate in each of the last two years. "Now it seems clear" says the IMF report "that the decline of the output growth in the industrial world will prove to be much sharper than had been generally expected". It is conceded, however, that this pessimist outlook for world economic growth is attributable not only to the increases in oil prices but also to the recent forecast that the US economy has already slowed down and is probably in a recession. The IMF report discounts the scope left to other industrial countries to 'offset' the impact of the US recession on the world economy on the ground that, in general, their economies are not buoyant and because of either the fact or the threat of inflation, they would not be in a position to adopt significantly more expansionary policies in their endeavour to compensate for the recessionary development in the US. According to the US Treasury Secretary, Mr G. Williams Miller, the recession in the American economy "is half over and should end by the second quarter of 1980." This analysis has to be read with the GATT interpretation that the Western countries owe their economic ailments mostly to their pursuit of "ill-founded" economic policies, as also the OECD forecast in the wake of the June 1979 OPEC price increases of a real growth rate of only two per cent for the industrial economies by July 1980.

The Puerto Rican debate

PRESIDENT CARTER has taken in his stride the Cuban rhetoric at the Havana summit conference, pillorying US "imperialism" with a colourful reference to the "colonial exploitation" of Puerto Rico. Indeed, he has courted a controversy in his own country by releasing from jail and returning to their homeland four Puerto Rican nationalists convicted of acts of terrorism on US soil. One of them had been found guilty of the attempted assassination of president Truman in 1950 and the other three of a gunfire attack on the US House of Representatives four years later. Although president Truman escaped unharmed, a guard was killed and on the other occasion several American Congressmen were wounded.

President Carter has argued that the convicted men have earned a reprieve by serving time in prison for more than 25 years. But an assembly of Hispanic American citizens, which he addressed in Washington some days ago, has expressed its doubts about the wisdom of his action. Moreover, before the president took the decision commuting the prison terms, the elected governor Carlos Romero Barcelo of the Commonweath of Puerto Rico had objected to the proposed move and uttered a warning that the return of the prisoners to the island as free men could pose a threat to public safety. Subsequent events seem to justify this concern. The freed Puerto Ricans were greeted and glorified as heroes on their arrival in the island by pro-independence groups and at least two of the nationalists rose to the spirit of the occasion and declared that they could not rule out violence in the pursuit of an independent status for Puerto Rico.

This kind of revolutionary fervour may not be universal among the people of Puerto Rico, although the boost now given to pro-independence movement is bound to enliven the debate on the island's future. The US policy itself has been piously neutral. The Puerto Rican people have been told again and again that they are free to reconsider their present Commonwealth status established by their own vote back in 1952 and, if they so wish, determine their political future through a referendum. The continuation of the current Commonwealth status could offer a middle ground between such Puerto Ricans as are resolved on outright independence and others who are firmly in favour of seeking statehood in the American union.

ticklish issue

The governor himself seems to favour statehood and has pledged himself to call for a plebiscite on the issue by 1983 if he is reelected next year. His views seem to be attracting a growing following, but apart from the confrontation, possibly violent, with the pro-independence groups which is implicit in this development, it is also a fact that, even among those favouring statehood, there are people who are not without mental reservations. This is because it is not certain that the US Congress might accept Spanish as the official language of a state of the union. This language issue, which involves Puerto Rican sentiments, both deep-rooted and widespread, is and will be exploited by the pro-independence groups, but the gainer from this controversy could well be the political middle which is in favour of the *status quo* not least because the Commonwealth status has decided economic advantages for Puerto Rico and Puerto Ricans.

This unique political structure entitles Puerto Ricans, as US citizens, to move freely between the island and the mainland where a large number of them have settled for pursuing their livelihood. Again, while Puerto Ricans, living in Puerto Rico, are eligible for welfare assistance available for American citizens, they enjoy exemption from US income taxes. Consequently, if and when a plebiscite is held, the verdict could well be a victory for hard-headed realism. By allowing the Puerto Rican extremists to return to the island and add fuel to the fire of pro-independence agitation or activities, if they can or will, president Carter has reaffirmed on behalf of his administration and his country both American advice and consent to the effect that Puerto Ricans are not only free but must exercise their freedom to decide their political future and, more specifically, the maintenance of the Commonwealth status for Puerto Rico within the US political structure. In this sense, the commutation of the prison sentences passed by US courts on the Puerto Rican nationalists for their acts of terrorism may have a meaning additional to its virtue as an act of compassion and relevant both to the debate going on in Puerto Rico over its political future and to the US commitment that this debate remains the affair exclusively of the people of the island.

World economy : the uncertain future

EVEN THOUGH the World Bank, in its report for the year ending June 30, 1979, has expressed gratification over the fact that the developing countries have successfully weathered the economic storms of the current decade, it has warned that any further proliferation of protectionism in the industrialised countries—in non-tariff guises such as contravailing duties, calls for voluntary "export restraints" on the part of the developing world, etc.—could seriously hamper the efforts of the developing nations at achieving economic growth through export increases. The report notes that a "healthy" export performance was one major cause of the recent growth in the developing countries, especially those which have more advanced and diversified economies. The export earnings of all developing countries have advanced sharply since 1966, reaching a total of $320,000 million in 1978. About 70 per cent of that amount is accounted for by the export of non-fuel goods and services.

Another major source of uncertainty for the developing world, the report stresses, is the prospect of uncertain growth in the industrialised world—the main market for the exports of the developing countries—owing to the recent increases in oil prices. The report points out that at the end of the calendar year 1978, the current account deficit in the balance of payment of the petroleum importing developing countries, in real terms, was no worse than it had been in 1973. In 1979, however, the bank expects, the aggregate balance of payments deficit may rise by about $10.000 million to a total of some $42,000 million.

The growth of all developing countries in 1978, excluding only the capital surplus oil exporters, was of the order of 4.9 per cent, as against 3.6 per cent of the industrialised countries. The South Asia and the East Asia regions registered growths of 5.4 per cent and 8.9 per cent respectively.

These growth rates, the report cautions, however, are no cause for rejoicing: they reflect more the slow growth in the industrialised world than the advances made by the developing countries—primarily through sound policy measures adopted by them in response to the economic shocks of the mid-1970s. Wide differences among regions in the developing world still exist—the 1978 growth rate in sub-Saharan Africa, it points out, continues to be modest around 2.9 per cent.

Very significantly, the report emphasises that even if the growth rates of the developing world were taken in the aggregate, the figures provide little hope that the so-called "gap" between the developing and the developed worlds might be narrowing. Even if the existing growth rates of the poor countries were to double while the industrialised world did no better than at present, it would take almost a century to close the absolute income gap between them, it says.

The report notes with approval what it calls "the most encouraging results" of the recently concluded Tokyo round of multilateral trade negotiations: the important changes with respect to codes covering customs valuation, government procurement practices, export subsidies, countervailing duties, product standards and the broadening of the code regulating safeguard actions.

The report concludes that the progress made by the developing countries has not been sufficient to reduce the numbers of the people living in poverty. Economic expansion during the next 25 years will be more difficult to achieve than during the past quarter. Just to maintain—not even to surpass—their current growth rates, the developing countries will need greater inflows of foreign capital. They will also have to make vigorous efforts to withstand protectionist pressures and to stimulate agricultural productivity.

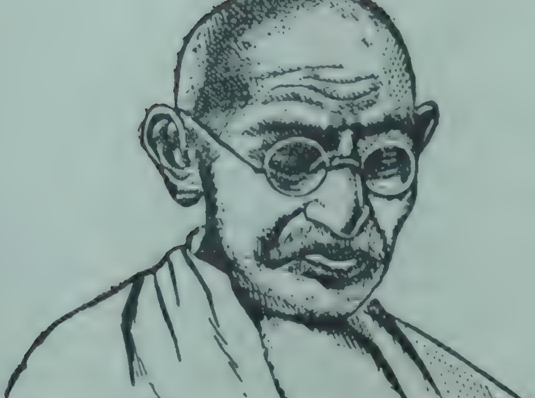
In respect of India, the report has expressed satisfaction over the foodgrains production reaching a record level of 126 million tons last year (the provisional estimates of the government of India, however, put this figure at 130.5 million tonnes), thus, making the last year the consecutive fouth year of solid economic gains. While noting that favourable weather conditions were a significant contributory factor to the foodgrains output going up to the record level, it stresses that there are growing indications

Nuclear Power

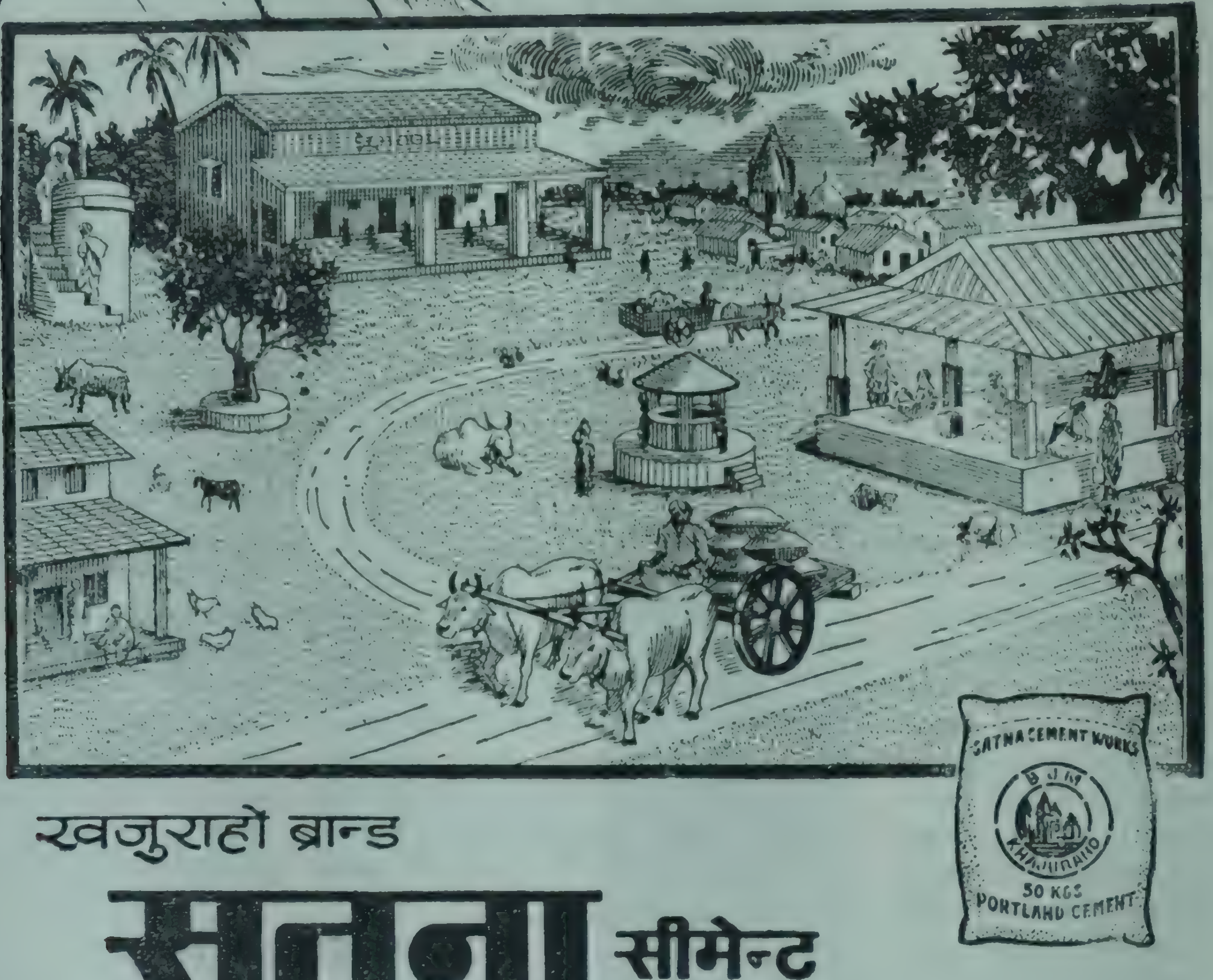
During 1978, 15,000 MW of new nuclear power plants were installed (compared with 10,000 MW during the preceding year), bringing the world's nuclear capacity to about 110,000 MW at the end of the year, to 5.8 per cent of the world's total electrical generating capacity. These facts are given in the annual report for 1978 of the International Atomic Energy Agency (IAEA), In Vienna.

The 227 nuclear power stations now operating in 21 of the agency's member states have a total operating life of 1700 reactor years.

At the end of 1978, one could say that there had been 20 years of commercial nuclear power generation without a single radiation-induced death or a serious radiation-induced injury at any nuclear power plant. This statement remains true even after the accident that occurred on March 28, 1979, at Three Mile Island.



"आदर्श गांव की मेरी यह कल्पना है कि उसके मकानों में काफी प्रकाश और वायु आ जा सके । गलियां, रास्ते, कुआं सब पक्के बने हों सबके लिये प्रार्थनाघर या मन्दिर हो, सार्वजनिक सभा के स्थान हों, गोशाला हो, प्राथमिक और माध्यमिक पाठशालायें हों जिनमें उद्योग की शिक्षा सर्वप्रधान वस्तु हो ।" —महात्मा गांधी


SATNA CEMENT WORKS
BJM
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50 KGS
PORTLAND CEMENT

खजुराहो ब्रान्ड

सतना सीमेन्ट

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निर्माता: सतना सीमेन्ट वर्क्स, सतना (म.प्र.)

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that the floor level of foodgrains production in this country has been raised substantially due to increased irrigation, application of fertilisers, etc., and an improved agricultural extension service.

World milk output

WORLD MILK production in 1979 is expected to rise faster than demand and aggravate existing problems of surplus dairy output, according to the Food and Agriculture Organisation (FAO). During 1978, excessive milk supplies in major dairying countries necessitated costly surplus disposal measures and kept prices in world trade at low levels.

This year, the FAO expects, milk production will go up faster than in 1978 when it rose by about one per cent to 457 million tons. But it will not equal the three per cent rise of 1977. Milk production is being encouraged by abundant food supplies from the bumper 1978 harvests and by higher government price supports in the USSR, eastern Europe and Oceania. It is expected that milk output will level off this year only in North America.

Demand for milk is strong in eastern Europe and the USSR and in some developing countries, notably oil exporting countries, following the recent rise in oil prices. However, sluggish demand is likely in the major markets of North America, Europe and Oceania.

Recently more than 1,000 Welsh dairy producers decided to give up milk production, according to a survey by the Farmers' Union of Wales. A high percentage of those leaving the industry are expected to take advantage of the EEC's beef conversion scheme, aimed at encouraging farmers to switch from milk to beef in order to reduce Europe's chronic over-production of dairy products.

According to the Farmers' Union survey, the biggest loss will be in the traditional milk producing area of West Wales, where nearly 800 producers are planning to leave the industry rather than invest in bulk milk collection equipment. Overall, they represent around 13 per cent of milk producers in Wales.

The FAO sees little hope for higher prices in international dairy trade this year. Export markets are over supplied, and despite some rise during the past year, trade prices of skimmed milk powder remain depressed, at about one third of the domestic market levels of northern hemisphere dairying countries. Dairy products stocks will tend to rise again, notably in the EEC and Oceania.

Stocks of powdered skimmed milk, however, will continue to be held in check by costly disposal programmes. The EEC, the US and other countries may donate an estimated 280,000 tons of milk powder to developing countries, hi; a complaint of
was shipped last year. Miour reported-
wanted skimmed milk will be has landed
stock, especially in the European with the
munity.

In 1978, the EEC sold nearly two million tons of powdered milk to pig and poultry farmers at heavily subsidised prices. The FAO expects that the EEC will not be able to stop growth in milk output in 1979. Output is also expected to grow further in Japan where the stimulation of high cost dairying has recently caused some surplus problems.

While milk production in developing countries may accelerate this year, milk output has stagnated recently even in countries with good potential for dairying such as Chile and Argentina. Argentina, a traditional exporter of dairy products, has now become an importer.

Eastern Economist 30 Years Ago

SEPTEMBER 30, 1949

Where am I to start this week ? There has been Vijayadesami Day and Gandhi Jayanti a—day of victory following, appropriately enough, on the day of victory. There has been the Devaluation debate in a special session of Parliament convened last Wednesday and Thursday. The Prime Minister left Delhi on Thursday for Poona and today he has left Bombay for the United States. The Deputy Prime Minister was loudly cheered in the House on Wednesday. General Delvoie, Military Adviser to the U.N.C.I.P., has caused indignation in Delhi by removing valuables of an enemy agent from Srinagar. The Constituent Assembly is meeting today to continue the second reading of the Constitution. And last, but not least, the weather in Dhlhi has changed; summer has ended and winter is slowly on its way.

With deliberate contrariness, I now propose to speak about an event—if I might so describe it—which I have left unmentioned. This is the Governor-General's Vijayadesami speech. It was about ways and means of financing India's economic progress. It was a good subject for Vijayadasami day as well as for every other. In fact as far as I can see it is the most important subject of all subjects now discussed, and I do most respectfully congratulate the Goveanor-General on recognising that the country's economic progress which has been so spaciously [planned has been hitherto planned without the means.

Egypt's silver thread

COTTON HAS been the mainstay of Egyptian economy for over a century. It has been the farmer's main source of income dictating crop rotation and land allocations. Its role has been equally important externally too. Being the main source of foreign exchange earnings, it was the most important item in export list. In 1977 it was overtaken by petroleum as the chief export earner, but it still remains an important item, accounting for nearly 25 per cent of exports.

While the world demand is rising in favour of natural fibres, Egypt's ability to benifit is being limited by the reduction in quantities available for export. The area devoted to cotton planting has been declining, while at the same time domestic consumption by Egypt's own textile industry has been increasing.

Egypt's problem is that it has limited cultivable area. With a population increasing at the rate of one million a year, there is an ever-expanding demand on the land available for food crops, the emphasis of the current development plan is on "food security". Added to this, there or housing and

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devo… ops is determined
by the governm… on an area-quota basis, whereby the farmers are obliged to devote a fixed portion of their lands to cotton. They are also obliged to sell all their production to the ministry of Agriculture at a price fixed by the government which is much below the export value. Against this, they get free drainage and irrigation, while other inputs such as seeds, fertiliser and pesticides are subsidised. These are also allocated and distributed by the government.

The result is that farmers are devoting more and more of their land to other more profitable crops, particularly fruits and vegetables, which are not controlled.

More recently, the government proposed a price increase of almost 30 per cent for cotton in January this year and is also investing heavily in land reclamation to free more area for agricultural development. But it is a slow and costly process, and, in the meantime cotton consumption by domestic textile industry is increasing rapidly. The net result is that Egypt is not able to raise its cotton exports.

Korea: industrial growth, exports

KOREA RECORDED 15.5 per cent growth in Gross National Product in 1976, which, though not maintained in the following year, was reported at 10.5 per cent—quite close to the official target. More recently, the growth has again looked up and a rate of around 12.5 per cent has been estimated for 1978.

Agricultural output in Korea fell by more than two per cent in 1978, but the increase in other areas, notably manufacturing and construction, more than compensated for this decline. The manufacturing output in 1978 grew by nearly 20 per cent compared with around 14.5 per cent in 1977. The textile industry, which spearheaded Korean industrialisation in the sixties, remains an important manufacturing activity, accounting for one-quarter of the total exports in 1978 and still providing over 20 per cent of employment in the manufacturing sector.

market diversification

The textile industry has been successful in diversifying its markets in recent years. For example, there has been a sharp fall in its dependence on the US market. There has also been an increase in domestic demand to compensate at least partly for the declining overseas demand. However, although the current five-year Plan (1977-81) expects this industry to remain a significant contributor to both output and exports in absolute terms, its role in the total economic picture is gradually declining.

Industrial diversification has also made considerable headway in recent years, with particular emphasis having been placed upon expansion of the chemicals and engineering industries. The contribution of these two industries to the total manufacturing output has gradually improved to nearly 44 per cent during the last few years. The output of industrial chemicals, electrical machinery and transport equipment had risen respectively by 14 per cent, 19 per cent and 18 per cent by December, 1978, compared with a year earlier. The planned rapid growth in these activities is aimed primarily at increasing economic self-sufficiency, by encouraging indigenous output in certain intermediate and primary goods, and inducing these industries to enter export markets.

The growth of electronics, metal and precision goods industries, which are not only relatively labour-intensive but also require high level of skills and technology, is also being stressed. The plants, equipment and engineering sectors of industry have also been identified as areas of high development potential. Evidence of the progress which has been achieved in this area is provided by the high proportion of domestically produced equipment now available for cement, fertilizer and steel processing and petroleum-based plants.

Steel production in Korea is also making steady progress. Headed by the development activity of Posco (the government-owned iron and steel company and the output expanded nearly five-folds between 1971 and 1976, and is now capable of meeting about 60 per cent of domestic requirements. In March 1978, Posco inaugurated its second sheet plant, with an annual capacity of 1.2 million tons, under its third phase expansion programme. This programme was recently completed ahead of schedule and its achievement also include a new blast furance, which has a daily capacity of over 7,500 tons of pig iron. Developments such as these have sharply reduced import requirements and have given rise to significant export trade in such products as steel and pipes, iron reinforced bars, wires, roads and rails.

production of autos

Expansion in the car industry has in the past been held back by the smallness of the domestic market, which had prevented economies of scale being fully realised. In 1978, however, production of passenger cars increased from the 1977 level of 44,000 units to 92,000 units and production of trucks rose from 42,000 to 66,000 in response both to renewed domestic demand and to the exploitation of the industry's export potential.

The exports of around 30,000 units of automobiles during 1978 was accompanied by the strength of domestic demand. The industry is still operating below its capacity of 220,000 units a year, but utilisation is rising and a further expansion of productive capability to 1.2 million units could take place by 1982. Korea's leading vehicle producer is the Hyundai Motor Company, which achieved record profits last year with over 18,000 "Pony" cars exported to areas such as Asia, Central and South America and the middle east. This year the car makes its entry into the European markets and exports are expected to jump further.

MOVING FINGER

Age cannot wither him, nor custom stale his infinite variety—I am referring, of course, to Mr Biju Patnaik. He continues to dare, without always caring whether he can pull it off. Had he succeeded in bringing together Mr M.G. Ramachandran and Mr Karunanidhi he would certainly have accomplished a miracle more than minor. The attempt, nevertheless, was worth making if only because it brought to the current political scene some fancy foot-work which was fun to watch. All the more so since most of us knew all the time that nothing could come out of it. The problem with these two Tamil Nadu political bosses is the same as that with Mr Charan Singh and Mr Jagjivan Ram or with Mrs Indira Gandhi and Mr Jagjivan Ram. In all these cases both want the number one place. Although Mr Karunanidhi had not made it a condition of DMK merger with the AI-ADMK that Mr M.G. Ramachandran should abdicate in his favour, it is fully to be expected that the chair will begin to rock under the latter from the very instant of the two parties merging. It is, in fact, impossible to visualise Mr Karunanidhi playing second fiddle to Mr M.G. Ramachandran, for whose naivete and amateurishness he has nothing but contempt.

There is indeed no reason why the DMK leader should accept a second place in Tamil Nadu politics. He has skilfully kept himself in the limelight and has been effectively using his demagogic resources for aggravating the erosion of the AI-ADMK image or even the personal popularity of its leader. Not that the MGR regime has been particularly disappointing. It is true that there is a general feeling that files do not move in the secretariat nor things get done in the administration. But as against this, there is also much satisfaction that the chief minister has been sincere and also substantially successful in discouraging corruption in high places and among his partymen. Again, while the industrial scene has been rather listless during the AI-ADMK regime, the ruling party is at least being given credit for not trying to fish in the troubled waters of industrial unrest. However, the AI-ADMK has no more been able than other political parties in living up to its election pledges and promises and there is consequently disenchantment with the MGR legend even in what is claimed to be his dedicated constituency of womenfolk in certain large social and economic strata of society. Quite possibly the emergence of some very popular celluloid heroes on the Tamil screen at a time when MGR himself has had to keep away from it is making its own contribution to this process.

Viewed against this background, the forging of the Congress (I)-DMK poll alliance appears to be a decisive political development. It is difficult to see what meaningful *riposte* the AI-ADMK can make to this challenge to the position it has been holding with the electorate in Tamil Nadu. The Janata (S) must be largely irrelevant to politics in that state since, for all practical purposes, the RSS is a non-issue south of the Vindhyas. As for the Janata party proper, it has few Tamil followers and no Tamil leader worth the name. The Left parties, consequently, could count for something in terms of seat arrangements and this possibility is what could mainly concern AI-ADMK election strategy in the wake of the deal concluded between Congress (I) and the DMK. Incidentally, not since Mahatma Gandhi may a father have shown more stern detachment towards a misbehaving son than Mr Karunanidhi; a complaint of drunk and disorderly behaviour reportedly made by the DMK leader has landed one of his progeny in trouble with the police and the law.

Some days ago the Lieut. Governor of Delhi expressed his disgust, anger and concern over the sorry state of community services and public utilities in the capital. It is, therefore, fair to ask Mr D.R. Kohli whether he himself has done anything in discharge of his responsibilities to improve matters. It is true that there are administrative and even constitutional limitations on his authority, but the point is that he does have some authority in and over the union territory. Has any of this authority been positively employed for the purpose of making life a little easier or better for the public towards whom he does have some obligations as Lieut. Governor? Surely a civilian of his experience and reputation could and should have made his presence felt at those very many points of the administration where there has been conspicuous failure on the part of the authorities concerned to serve the public interest.

Take, for instance, the criminal activities of a section of Delhi water supply workers which has been brazenly and repeatedly indulging in acts of sabotage. These malefactors have been wilfully damaging or destroying the water mains and cutting off water supply to the citizens with complete immunity from police intervention or prosecution in a court of law. These tactics are stated to be part of an agitation prompted by inter-union rivalries and the political group which happens to be in control of the civic administration is accused of being behind the back of the particular union some of whose members are suspected of being responsible for acts of sabotage. Is it possible that Mr Kohli is just not in a position to intervene and assert the authority of law against saboteurs? After all, the Lieut-Governor happens to represent the power of the central government in the union territory. Are we to infer then that the centre is in fact powerless?

VB

Economic Analysis

Inter-industry flows : a profile of interdependence

THE RECENT reports about a negative rate of growth of the industrial sector during May-July, 1979, coming after nearly eight per cent growth last year, have raised new questions. Until only a few months back, high optimism prevailed, particularly in view of a six per cent agricultural growth and 6.7 per cent industrial growth during the last four years. The spurt in net domestic investment, from an average 12.5 per cent annual growth rate since 1960-61, to 15.6 per cent in 1974-75, and 17.2 per cent in 1976-77, only fortified the optimism.

The explanations of the recent declining trend are as varied as those of the earlier encouraging trends. The inter-industry transactions, however, have not been paid necessary attention. This has been so mainly because the transaction data were published only in early 1979, but also because the methodology of a comprehensive input-output analysis of the economy is yet to emerge. (The Planning Commission's input-output table appended to the draft fifth Plan, gave the aggregates, but the Commission did not explain the methodology, or the techniques of transcending the limitations inherent in the statistics, particularly those of the unorganised sector).

The Reserve Bank of India published early in 1979 the estimates of inter-industry transactions, 1968-69 by the Central Statistical Organisation (CSO). The basis is mainly the disaggregated ASI data for the reference year.

Indices of availability of commodities and the structure of final demand were worked out for the period 1970-71—1975-76 on the basis of 1968-69 inter-industry transactions data. In this exercise, technical coefficients have been assumed as constant and commodity production has been classified by type of use viz. intermediate goods, capital goods and consumption goods.* According to these estimates, the share of the product of the services sector went up from 37.5 per cent in 1970-71 to 39.5 per cent in 1975-76, and that of the commodity sector declined from 62.5 to 60.5 per cent. Availability-wise, intermediate and capital goods increased by about 19 per cent each, while consumer goods went up by 13.4 per cent. Exports increased at a higher rate for all. Imports of intermediate goods declined by 2.1 per cent, but increased in the case of capital goods by 3.2 per cent. Imports of consumer goods increased by 81.6 per cent, as compared to an export increase of 58.8 per cent indicating that, in the rate of growth in availability, the contribution of imports was higher in consumer goods than in the other two.

Going by the ASI data, three industry groups—mainly intermediate and capital goods—had 27.05 per cent of total fixed capital and 27.44 per cent of goods output in 1973-74. These percentages went up to 31.10 and 29.02 respectively in 1976-77. The three groups are: (a) chemicals and chemical products (other than petroleum and coal and the products thereof); (b) basic metals and alloys; and (c) machinery, machine tools and parts, except electrical machinery. Of these three, in 1968-69, consumer goods constituted 33.07 per cent of the total output of the first one and 5.83 per cent of the third one. The rest were intermediate/capital goods. Except for a marginal change in the first one, which includes perfumes, cosmetics and matches, the share of consumer goods in the total output of these industry groups does not appear to have increased.

For the registered manufacturing and mining and quarrying sectors as a whole, capital goods had a share of about 45 per cent and intermediate goods about 19 per cent of net value added in 1973-75. For the manufacturing sector alone, these shares were slightly higher. The three industrial groups together had 28.04 and 30.94 per cent of net value added by manufacture in 1973-74 and 1976-77 respectively.

The composition of the flow between these industry groups, on the one hand, and the rest, on the other, or within these groups provides some significant indicators. The more specific identification of commodity and financial flow, along with the disaggregated multipliers for each sector, can unveil a wide range of demand-supply and cost-price functions. The basis for a peaceful coexistence of inflation and recession, can perhaps be locat-

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***S.L. Shetty's estimates of the growth trends of these three types are based on a reclassification of the CSO's industry-wise estimates. See 'Structural Retrogression in the Indian Economy Since the Mid-Sixties,' P 14.**

ed primarily in the aforesaid pattern and the differential rates of groupwise separated inter-industry flows. But that analysis needs a more elaborate, and a unavoidably complex mathematical analysis. This article presents only simplified description relevant mainly to the exchange between these three industry groups and the rest of the industries/industry groups, and among themselves.

The left hand side of the three tables give percentage shares of the sectors (industry/industry groups) in the total payments made by the sector concerned. On the right side are the percentage figures of receipts by the sector from different sectors.

The sector numbers and classification on the left hand column are according to the CSO's aggregated classification used in inter-industry transactions (IIT). The description of the three industry groups is according to the National Industrial Classification Code (NIC). The NIC description of : (a) chemicals and chemical products is comparable to the sum of CSO's IIT numbers 28, 29, 30, 31 and 32; (b) basic metals and alloys industries to that of IIT numbers 35 and 36 together; and (c) machinery, machine tools and parts industries to the sum of IIT numbers 38, 39 and 40. Aggregates of the IIT figures have been made to ensure comparability. For all other estimates, ASI and National Accounts Data for different years have been used.

The percentage figures have been separately tabulated for goods excluding construction, and goods and services together. The IIT data include receipts and payments relating to transport services, water, gas, electricity, banking, insurance and other services.

For our present purpose of ascertaining the flow of goods, the relevance of the services sector is rather

TABLE I

Chemicals and Chemical Products* Industries: Transactions

(Per cent)

Sector number	Description	Payments to A	Payments to B	Receipts from A	Receipts from B
1-7	Agriculture, forestry, fishing and animal husbandry	11.74	8.19	45.18	31.90
8-11	Mining and quarrying	3.98	2.78	0.39	0.27
12-14	Sugar, food and beverages	14.06	9.81	4.07	2.87
15-19	Tobacco products and all textiles	3.28	2.29	10.64	7.51
20-24	Wood, furniture, paper, printing and leather products	—	—	2.78	1.96
25	Plastic and rubber products	0.86	0.60	5.68	4.01
26-27	Petroleum, miscellaneous petroleum and coal products	2.44	1.70	0.10	0.07
28-32	Chemical and chemical products	46.25	32.28	22.98	16.23
33-34	Cement and other non-metallic mineral products	1.85	1.29	0.78	0.54
35-36	Iron and steel industries and foundries and other basic metal industries	2.95	2.06	1.70	1.02
37	Metal products except machinery and transport equipment	4.26	2.98	0.88	0.62
38-40	Machinery other than electrical	—	—	0.64	0.45
41	Electrical machinery, apparatus and appliances	1.38	0.93	0.92	0.65
42	Railway transport equipment	—	—	—	—
43	Other transport equipment	—	—	1.79	1.26
44	Miscellaneous manufacturing industries	—	—	1.54	1.09
	Other goods	6.95	4.86	0.42	0.30
45	Construction	—	3.49	—	2.11
46-51	Electricity, gas, water supply, transport service and communication	—	9.93	—	0.06
52	Trade	—	13.59	—	—
54+55	Banking and insurance	—	2.19	—	—
58	Medical and health	—	—	—	27.20
59	Other services	—	0.98	—	—
	Total	100.00	100.00	100.00	100.00

*Total of (a) organic and (b) inorganic heavy chemicals, (c) fertilisers, (d) paints, varnishes and lacquers (e) other chemicals and chemical products.

Notes : 1. Figures in columns A are percentages to total of goods excluding construction and in columns B are percentage to total of goods and services.

2. 'Other goods' are totals of industries not specified.

3. The total would not tally due to rounding off,

Source : RBI Bulletin; November, 1978.

narrow. Besides the monetary sector introduces a new set of variables, which need not be taken into account here. The only exception is medical and health services, a major source of demand for drugs and other pharmaceutical products. The industry's demand for construction goods constitutes a very small share of the total, the lion's share of which goes to public and private consumption demand. Construction has therefore been kept out of column A on both payment and receipts side.

The highlights of the transactions can be separately summarised as follows:

Chemicals and Chemical Products: A littie less than half of the input are supplied by the industry group itself, and about three per cent by the basic metals and alloys industry. The two groups, all textiles and sugar, tobacco, food and beverages together, account for 17.34 per cent of the industry's input purchase, while the primary sector supplies 11.74 per cent.

On the receipt side, agriculture constitutes more than 45 per cent and textiles, sugar, food and beverages together about 15 per cent of the total demand for the industry's output. The high share of agriculture is due to fertiliser being one of the products of the industry. More than 22 per cent of the industry's demand comes from within the industry itself.

Basic Metals and Alloys Industry: More than 60 per cent of its input value is supplied by the industry itself. Mining and quarrying supply 18.56 per cent and chemical and chemical products industry supplies 3.63 per cent.

Of the demand for the output, 28 per cent comes from within the industry, followed by metal products (except machinery) with 22.71 per cent, electrical machinery, apparatus and appliances with 15.21 per

TABLE II

Basic Metal and Alloys Industries: Transactions

(Per cent)

Sector number	Description	Payments to		Receipts from	
		A	B	A	B
1-7	Agriculture, forestry, fishing and animal husbandry	0.38	0.21	—	—
8-11	Mining and quarrying	18.86	10.21	—	—
12-14	Sugar, food and beverages	—	—	0.36	0.26
15-19	Tobacco products, and all textiles	0.61	0.33	0.85	0.61
20-24	Wood, furniture, paper, printing and leather products	0.46	0.25	0.08	0.57
25	Plastic and rubber products	0.17	0.09	0.16	0.12
26-27	Petroleum and miscellaneous petroleum and coal products	7.13	3.86	0.01	—
28-32	Chemical and chemical products	3.28	1.77	2.06	1.48
33-34	Cement and other non-metallic mineral products	1.93	1.04	0.90	0.65
35-36	Iron and steel industries and foundries and other basic metal industries	60.43	32.73	28.01	20.21
37	Metal products except machinery and transport equipment	3.50	1.89	22.71	16.39
38-40	Machinery other than electrical	—	—	12.84	9.26
41	Electrical machinery, apparatus and appliances	—	—	15.21	10.97
42	Railway transport equipment	—	—	3.58	2.59
43	Other transport equipment	1.87	1.01	8.29	5.98
44	Miscellaneous manufacturing industries	0.08	0.04	4.14	2.99
45	Construction	—	11.22	—	26.54
46-51	Electricity, gas, water supply, transport service and communication	—	16.29	—	0.47
52	Trade	—	14.33	—	—
54+55	Banking and insurance	—	2.72	—	—
58	Medical and health	—	—	—	—
59	Other services	—	1.26	—	0.53
	Total	100.00	100.00	100.00	100.00

*According to National Industrial classification code.

In the CSO's estimates of inter-industry transactions, it is divided into (a) Iron and Steel Industries and Foundries and (b) Other basic metal industries (Nos. 35+36 in the extreme left column)

Notes:
1. Col. A relates to total of goods excluding construction and column B to all goods and services.
2. The total would not tally due to rounding off.

cent, machinery and machine tools with 12.84 per cent, and other transport equipment—automobiles, scooters and motorcycles, and bicycles—with 8.29 per cent.

Machinery other than Electrical: The industry supplies to itself about 45 per cent of its input value. Another 25.36 per cent is supplied by the chemicals and chemical products and basic metals and alloys industries. The other significant source of supply is 'metal products except machinery and transport equipment'.

More than half of its output value is consumed by the industry itself, while sugar, tobacco, food, beverages and all textiles together purchase 19.46 per cent electrical machinery, apparatus and appliances, including refrigeration, radio/TV, transistors, and other durable household gadgets, and 'other transport equipment' purchase more than 23 per cent of the industry's output.

Aggregating of the transactions of the three industries also yields interesting indications. The transactions among the three accounted for more than 11 per cent of total input purchases in the economy and a little about 10 per cent of all output sales. The total payments of these three for their inputs is more than 50 per cent of all inputs used in the industrial sector. Their total receipts from the sale of their output is about 30 per cent of total industrial output. Among themselves, they transact 40 per cent of their total payments for input and about 36 per cent of their receipts from output.

Some implications of such a composition of their transactions can be seen in broad terms, even though our aggregates include a wide range of industries.

The increase in the percentage shares of these industries together in total fixed capital, output and net value added in the entire industrial sector has already been mentioned. The strong predominance of intermediate and capital goods in the total output of these industries also has been noted.

Aggregating of the transactions of the three industries (chemicals and chemical products, other than petroleum and coal and the products there of; basic metals and alloys; and machinery, machine tools and parts, except electrical machinery) yields interesting indications. The transactions among the three accounted for more than 11 per cent of total input purchases In the economy and a little above 10 per cent of all output sales. The total payments of these three for their inputs is more than 50 per cent of all inputs used in the industrial sector. Their total receipts from the sale of their output is about 30 per cent of total industrial output. Among themselves, they transact 40 per cent of their total payments for input and about 36 per cent of their receipts from output.

The real impact of a change in the level of their output and of corresponding input requirements—on the related industries—can be seen only in a coefficient matrix. But without that too, some significant indicators can be discerned by simple arithmetic.

The percentage breakdown of their payments to and receipts from various industries given in the three tables refers only to their total purchases and sales. Their internal transactions can be wholly seen in these tables. They use about half of all industrial input and produce a little less than one-third of total industrial output.

For each rupee value of their input purchase, 60 paise is paid to other industries, while for each rupee of their output sale, they receive 64 paise from other industries. Since most of the demand for their output is a derived one so is their input-requirement.

In 1976-77, for example, their purchase from the primary sector was about Rs 352 crores, but their sale to the primary sector was around Rs 1,890 crores. Most of this revenue was from sale of fertilisers. The rate of growth of fertiliser consumption, in determination of which government transfer payments, agricultural output prices and public expenditure on irrigation are important factors, is a direct determinant of the demand for a considerable proportion of chemicals and chemical products.

Textiles, sugar, tobacco, food and beverages together received Rs 545 crores from these three industry groups, but paid Rs 1,590 crores to them. The largest part of output of the five industries is of consumer goods.

Non-machinery metal products; electrical machinery apparatus and appliances; and non-railway transport equipment industry together constitute about 15 per cent of total demand for the output of the three industries under discussion. In 1976-77, the former paid about Rs 1,675 crores to the latter, but received hardly anything as revenue from them.

This one-way traffic in transactions is due to the generation of outside demand in the first stage, followed by a second stage within the three industries, along with some *inter-transaction* e.g., with mining and quarrying in case of basic metals and alloys.

Outside the manufacturing sector, construction, transport services and 'other services' are somewhat relevant to each of the three industry groups under discussion. Medical and health services account for a big share of revenue of the chemi-

Do such fluctuating trends occur merely due to a high price-elasticity of investment goods? At least the price trends would not support such an explanation. Is it because the rate of increase in the derived demand of investment goods—after having gone through a long-term accelerating growth rate upto the mid-sixties—is reaching its limit?

The composition of the related inter-industry transaction may provide a dependable *empirical* basis for answering the question. With a largely constant input-output rate, a change in the rate of increase of the input purchases of these three industries has its necessary effect both on the industries themselves and the industries from which they buy. Going by the ratio of intra-and inter-transactions, for every additional rupee of payment for inputs by them, these industries increase (a) their output sale by 40 paise and (b) the sale of output of other industries by 60 paise. Similarly, for each additional rupee of their output sale, they receive 36 paise from themselves and 64 paise from others.

cals and chemical products industry. Construction receives about 11.22 per cent of the total payment—for goods and services—made by the basic metals and alloys industry (col, B of Table II), but pays 26.54 per cent of total revenue of the latter.

In the case of transactions between these three and the industries producing mainly consumer goods, the change in demand for the former's output would be directly influenced by the change in demand for the consumer goods concerned. If food and beverages are faring well, its salutary effect on the related chemicals would be visible without any significant time-lag. Food machinery would take a little longer, and basic metals and alloys still longer. The magnitude of the resultant increase in related transactions will vary from one point of time to another, since the total linkage-effect will be spread out and cumulative.

The price-differentials, particularly when the price level shows a quick uptrend—marked by differential rates of increase in the prices of various commodities or commodity-groups—are likely to affect the primary demand immediately, followed by stages of linkage-effect over secondary or derived demand.

Theoretically, the longer the time-path distance between the primary demand change and the linkage-effect, the lesser should be the derived price-effect. Unless, of course, the rise in the prices of wage goods leads to higher cost.

A corroborating price change trend in 1977-78 over the previous year need not prove the theory but theory has some empirical relevance as one of the explanations. The prices of food articles and textiles, for example, went up by more than 11 per cent in 1977-78 over the previous year. The change in the prices of machinery and machine tools, non-electrical machinery, basic metals and alloys iron and steel and ferro-alloys, or chemical products ranged between 0.8 and 1.5 per cent.

During the subsequent six-month period, (April to October, 1978) the rates happened to be the other way round: 1.9 and 2.5 per cent for foodgrains and textiles respectively, but for basic metals and alloys (10.5 per cent); iron and steel and ferro-alloys (14.1 per cent). For others the rates were much higher than in the earlier period.

But, output-level-wise, the three industries under discussion kept increasing their share in total output. It moved up from 27.44 per cent in 1973-74 to 29.17 per cent in 1975-76, and then declined marginally to 29.02 per cent. Food, beverages, and textiles and textile products together shared 39.26 per cent in 1973-74, 36.03 per cent in 1975-76, and 34.76 in 1976-77.

Trends in the period thereafter can be seen in the CSO's industrial production index figures, though these are only largely comparable. Food manufacturing increased in 1977-78 over the earlier years by 9.8 per cent and textiles by 0.8 per cent. Basic metal industries declined by 0.4 per cent (after an 18.3 per cent increase in the previous year), though non-electrical machinery went up by seven per cent. The output growth of chemicals and chemical products was of the order of 18.1 per cent in 1976-77, but 6.7 per cent in 1977-78.

Do such fluctuating trends occur merely due to a high price-elasticity of investment goods? At least the price trends would not support such an explanation. Is it because the rate of increase in the derived demand of investment goods—after having gone through a long-term accelerating growth rate upto the mid-sixties—is reaching its limit?

Theoretically, the longer the time-path distance between the primary demand change and the linkage-effect, the lesser should be the derived price-effect. Unless, of course, the rise in the prices of wage goods leads to higher cost.

The composition of the related inter-industry transactions may provide a dependable empirical basis for answering the question. With a largely constant input-output rate,

TABLE III

Machinery, Machine Tools and Parts* (except Electrical Machinery) Transactions

(Per cent)

Sector number	Description	Payments to A	Payments to B	Receipts from A	Receipts from B
1-7	Agriculture, forestry, fishing and animal husbandry	0.97	0.69	0.98	0.92
8-11	Mining and quarrying	0.28	0.19	1.71	1.60
12-14	Sugar, food and beverages	0.08	0.05	3.05	2.86
15-19	Tobacco products, and all textiles	0.70	0.49	16.41	15.38
20-24	Wood,furniture, paper, printing and leather products	2.73	1.93	0.29	0.27
25	Plastic and rubber products	3.66	2.59	—	—
26-27	Petroleum and miscellaneous petroleum and coal products	1.45	1.03	—	—
28-32	Chemicals and chemical products	3.63	2.57	0.94	0.88
33-34	Cement and other non-metallic mineral products	0.25	0.17	—	—
35-36	Iron and steel industries and foundries and other basic metal industries	44.91	31.83	—	—
37	Metal products except machinery and transport equipment	8.69	6.16	0.25	0.23
38-40	Machinery other than electrical	21.73	15.40	51.81	48.55
41	Electrical machinery, apparatus and appliances	3.95	2.80	9.21	8.63
42	Railway transport equipment	—	—	0.48	0.45
43	Other transport equipment	2.91	2.07	13.96	13.09
44	Miscellaneous manufacturing industries	0.63	—	0.85	0.80
45	Construction	—	2.82	—	—
46-51	Electricity, gas water supply, transport service and communication	—	9.12	—	6.28
52	Trade	—	13.67	—	—
54+55	Banking and insurance	—	4.80	—	—
58	Medical and health	—	—	—	—
59	Other services	—	1.93	—	—
	Total	100.00	100.00	100.00	100.00

*According to NIC code. In the CSO's estimate of inter-industry transactions it is divided into (a) agricultural machinery, (b) industrial machinery for food industry, and (c) other machinery (Nos. 38-40 in the extreme left column)

Note: 1. Column A relates to total of goods excluding construction and Column B to all goods and services.
2. The total would not tally due to rounding off.

a change in the rate of increase of the input-purchases of these three industries has its necessary effect both on the industries themselves and the industries from which they buy. Going by the ratio of *intra*- and *inter*-transactions, for every additonal rupee of payment for inputs by them, industries increase: (a) their output sale by 40 paise; and (b) the sale of output of other industries by 60 paise. Similarly, for such additional rupee of their output sale, they receive 36 paise from themselves and 64 paise from others.

As stated earlier, their payments constitute more than half of the total value of input payments by the industrial sector. Obviously, therefore, at constant price-relatives, a change in the rate of their growth will be a crucial variable in the general industrial growth rate.

What needs to be examined in depth, is the probable reason for the fluctuating trends mentioned above. Investment produces its own multiplier, no doubt and that multiplier can very well be greater than consumption multiplier in the short run. But in an underdeveloped economy, the gap between these two multipliers also tends to become rigid in the long run.

This gap is the offshoot of structural peculiarities of industry, and of national product. The product- and technology-mix, and the price-structure, tends to become rigid in the loug run. Inflation or recession or the intriguing coexistence of the two in the recent years is a manifestation, not a cause.

A brief and incomplete analysis like the one made above cannot provide a conclusive empirical basis for such a generalised argument But even the broad indicators within the limitations of data, do corroborate the argument.

—T. Chakravarty

British trade unions in the dock

V. R. Bhatt
London

In this article, V.R. Bhatt deals with the changing industrial relations scene in Britain. The Thatcher government's confidence that the country by and large will back its economic policies, however strong the trade union opposition, has spread to the employers in the private sector who are now ready to take on unions when their militancy threatens big losses. Equally significant is the tendency of big firms to rationalise their operations by closing down loss-making plants even though this means throwing workers out of jobs. But, the author feels that this does not mean that the British unions can be written off as a spent force, although they seem to have learnt a lesson that general public cannot be held to ransom in their fights with employers without damage to themselves in a democracy.

WILL BRITAIN face another winter of economic disruption such as the one that precipitated the general election in which the Labour government was trounced by the Conservatives led by Mrs Thatcher? The disruption was caused by an epidemic of strikes launched by trade unions to obtain wage increases two or three times the limit set by the Labour government. The methods the strikers used, particularly secondary picketing (the extension of picketing from places of work to factories and other work places not involved in the strikes) affected every household in the country, led to hundreds of thousands of workers not on strike being laid off, apart from inflicting big losses in production and service industries, businesses and exports. The consequences were disastrous for the Labour party, which had been in power for ten out of the previous fourteen years and their main supporters, the trade unionists. They were spelt out by the former Chancellor of the Exchequer, Mr Denis Healey, who said last week:

"It was the trade unions' actions last winter which defeated the Labour government on a wave of anti-union feeling that swept the Conservatives to power. Not only did the general public turn against the "lunatic left" fringe of the party but so did trade unionists, a third of whom voted Conservative, confirming Aneurin Bevan's conclusion about the Labour defeat in 1959, following a wave of strikes, that working people voted against the consequences of their own irresponsibilities."

Another cabinet minister of the Callaghan government, Mrs Shirley Williams, told the annual meeting of the Trade Union Congress, just concluded, that last winter's "rash of strikes" had their harshest effect on Labour's own people—pupils in state schools, National Health Service patients, etc. She added that the great majority of today's strikes "take a poke at the employer and end up giving a black eye to the public."

An answer to the question whether the Thatcher government faces a repeat or another bitter winter of trade union militancy was given partly by the trade union conference last week. Since Mrs Thatcher is determined to implement the policies on which she fought the election but which are denounced and opposed by the trade unions, a confrontation between the elected government and organised labour is the logical outcome in the coming months. But what emerged at the conference, apart from ideological rhetoric and repeated attacks on her government was a significant advance of the moderates and pragmatists over the left wing. The intriguing question is whether this moderate mood will continue as the effects of Mrs Thatcher's policies become evident in a massive loss of jobs through retrenchment in the public and the private sectors, in rising prices from the hikes in indirect taxes and the ending of price and other controls, both developments considered by Mrs Thatcher as transient but essential towards eventual economic growth and financial health.

The most significant decision of the trade union conference was to reject, though by a narrow majority, the core resolution calling for a nation-wide campaign of mass demonstrations against the government's economic policies. The alternative strategy approved is to hold discussions with the government with a view to persuading it to amend the economic and social policies which are considered anti-union or anti-national. Simultaneously, the TUC is to launch a campaign to get the public on its side by persuasion and reasoned argument. Implied in the resolution is that strikes will be the last resort.

compulsory ritual

The current industrial situation does not project that the strikes are to be the last resort. They are still, what a trade union leader described at the TUC conference as a "compulsory ritual". The most damaging of the strikes at present by the Confederation of Shipping and Engineer Unions has cost industry £1200 million and forced crippled firms to lay off 100,000 workers, including 30,000 by the prestigeous Rolls Royce. Sir Michael Edwards, chairman of Britain's biggest automobile complex, Leylands, has said that the profit of £20 million the company had earned last year had been wiped out by the closure of plants due to the engineers' strike. He was satisfied generally with his work-force's record of production but mentioned that the best working day his company had was in August when unofficial stoppages in various sections of its plants amounted to only 13! Among the other strikes are the one which has blacked out for a month Independent Television, the Air-India strike which has entered its second month and the longest of the closures, that of the *Tmies* group of papers since November last year though not due to a strike but a deadlock between the printers' union and the company.

The Thatcher government's confidence that the country by and large will back its economic policies, however strong the trade union opposition, has spread to the employers in the private sector who are now ready to take on the unions when their militancy threatens big losses. The Confederation of British Industry (CBI) is planning to set up an insurance scheme in association with Lloyds to cover losses incurred by firms whose employees go on strike. The draft plan under discussion with major Lloyds brokers is for companies to contribute their premiums to a mutually owned fund. If faced with a strike, the companies would be paid for a part of the losses suffered while the excess could also be re-insured. The CBI sees the scheme as a way to produce a fairer balance of power between the unions and firms which cannot afford prolonged strikes and are forced to concede claims beyond their means. Simultaneously, the CBI is pressing the government to cut social security benefits paid to strikers by making their unions pay more from their funds to striking members.

Equally significant is the tendency of big firms to rationalise their operations by closing down loss-making plants even though this means throwing workers out of jobs. This is in line with Mrs Thatchers policy of profit as a test of good management and workers' productivity.

fight for survival

The giant British Leyland, which is now 95 per cent state owned, has announced without consulting the unions that it will axe 25,000 jobs (out of 165,000) and close down 13 plants over the next two years "in its fight for survival". The government on its own is imposing widespread economy cuts in all departments and services, including education and health, which involves retrenchment of nearly a lakh of employees. The trade unions have pledged to fight the cuts but the government and employers do not seem to be worried as they feel the majority of people are on their side vis-a-vis the unions. Indeed, for the first time in post-war years, the trade unions have lost their influence as a major pillar of the economy with the government. The general secretary of the TUC, Len Murray complained in his speech at the conference "We are consulted (by the government) after the fact, after all the important decisions have been made".

The unions now seem to recognise that it was their insistence on free collective bargaining—in defiance of the Labour government's policy of agreed voluntary restraint—that brought about the epidemic of strikes last winter and the present situation of public hostility. Free collective bargaining is what Mrs Thatcher offered in her election manifesto. The catch is that free collective bargaining for workers is what free market forces and unfettered competition is for the capitalistic economy where the level of wages are tied to profits and productivity. This is as it should be in the long term. But for Mrs Thatcher, it should also be in the short term. Hence the cuts in jobs in the public and the private sectors and the prospect of a sharp rise in unemployment.

However, it would be premature for Mrs Thatcher and Britain-watchers to write off the British unions as a spent force. The British worker, cushioned by the Welfare State—which even Mrs Thatcher has refrained from dismantling—and drawing strength from the power of organised labour is unlikely to bend where his dignity or self-respect are involved or where he feels unjustly treated. The unions have certainly learnt a lesson that the general public cannot be held to ransom in their fights with employers without damage to themselves in a democracy. (Trade union leaders in India, please note). But Britain is still dominated by the rich as the five per cent at the top of the economic scale own or control nearly half of the country's wealth. Mrs Thatcher must, therefore, tread cautiously on her road to utopia through capitalism unadulterated by socialism.

slippery ground

Her greatest risk, apart from union action against drastic cuts in public spending and rising unemployment, is in stirring up national sentiments against some of her policies. One of her aims is to reduce the role of the state in the economy by selling off or denationalising parts of the public sector. Her government is apparently about to sell a part of the North Sea state holdings to the private sector. Another is to end the monopoly of the post office by encouraging competition from the private sector. Mr Callaghan, who has kept a low profile in unions affairs after his defeat in the last election, has warned the government against selling off valuable national assets, such as North Sea state holdings. He has pointed out that to do so when oil prices

THIS IS ONLY AN ANNOUNCEMENT AND NOT A PROSPECTUS

VIMAL Reliance Textile Industries Limited

(Incorporated under the Companies Act, 1956)

Registered Office: Court House, Tilak Marg, Dhobi Talao, Bombay 400 002.

Announcement regarding 1,40,000 11% Convertible Mortgage Debentures of Rs.500/- each for cash at par.

Applications have been made to the Stock Exchanges at Bombay, Delhi, Madras and Ahmedaded for permission to deal in and for an official quotations of the Debentures of the Company.

THE SUBSCRIPTION LIST WILL OPEN AT THE COMMENCEMENT OF BANKING HOURS ON WEDNESDAY, THE 3RD OCTOBER, 1979 AND WILL CLOSE AT THE CLOSE OF BANKING HOURS ON SATURDAY THE 13TH OCTOBER, 1979 OR EARLIER AT THE DISCRETION OF THE DIRECTORS OF THE COMPANY, BUT NOT EARLIER THAN THE CLOSE OF BANKING HOURS ON FRIDAY, THE 5TH OCTOBER, 1979.

STORY OF THE COMPANY

Company named Reliance Textile
dustries Private Limited was incor-
rated in the State of Maharashtra
11th February, 1966 under the
mpanies Act,1956 (hereinafter refer-
to as the "Act"). This Company
s converted into a public limited
mpany and a fresh certificate of
ange of name was obtained
m the Registrar of Companies,
harashtra, Bombay, on 9th July,
75.

order of the High Court of Karna-
ta at Bangalore dated 13th January,
77 and the order of the High Court
Judicature at Bombay dated 24th
vember, 1976, a scheme of amalga-
tion between the said Reliance
xtile Industries Limited (hereinafter
led the Amalgamating Company')
d another company called Mynylon
nited, a company incorporated in
state of Karnataka on 8th May,
73 under the Act (hereinafter called
e Amalgamated Company') was
ctioned whereby all the properties,
hts and powers of the Amalgama-
g Company were vested in, and all
liabilities, duties and obligations
the Amalgamating Company were
en over by the Amalgamated Com-
ny with effect from 1st July, 1975
suant to and in terms of section
of the Act in consideration of the
algamated Company allotting
50,000 equity shares of Rs. 10 each
dited as fully paid up to the share-
ders of the Amalgamating
mpany.

name of the Amalgamated com-
ny, was changed to Reliance Tex-
Industries Limited with effect
m 11th March, 1977 and a fresh
tificate of Incorporation was issued
the Registrar of Companies, Karna-
a, Bangalore.The Registered office of
company was subsequently shifted
m the state of Karnataka to the State
Maharashtra on 4th August, 1977.

SINESS OF THE COMPANY

Company has an integrated
dern Synthetic Yarn' Processing
Synthetics Fabrics Plant at Naroda
r Ahmedabad in Gujarat State. It
yarn and fabric divisions housed
ver 65,100 square metres of built
area with most up-to date machi-

9th, 10th, 11th and 12th year from the date of allotment thereof

iv. The holders of the Debentures shall be entitled to convert 20% of the face value of each Debenture of Rs. 500 held by them into four Equity Shares of Fs 10 each credited as fully paid-up at a premium of Rs. 15 per share, such option to be exercised by the Debenture-holders during the period of two months from 1st October, 1980 to 30th November, 1980 (both days inclusive), so, however, that the allotment of the new Equity Shares shall be and made effectual only on 1st January, 1981.

The Debenture holder desiring to exercise his option of conversion shall give notice to the company at its Registered Office during the period mentioned above to enable the company to make the appropriate endorsement on the Debenture Certificate, such notice along with his Debenture Certificate to be received by the company not later than 7th December, 1980.

BOARD OF DIRECTORS

DHIRUBHAI HIRACHAND AMBANI
Chairman and Managing Director
Usha Kiran,
15, Carmichael Road,
Bombay 400 026

RAMNIKLAL HIRACHAND AMBANI
Joint Managing Director
Vimal House,
Navrangpura, Ahmedabad 380 009.

KALLURI GOPAL RAO
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Bangalore 560 005

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Walkeshwar Road, Bombay 400 006.

MANSINGH LAXMIDAS BHAKTA
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38, Bhulabhai Desai Road,
Bombay 400 026.

TONSE RAMESH UPENDRA PAI
'Chitrakala',
Manipal 576 119,
Karnataka State.

KONCHADY SANTHAPPA SHENOY
Nominee Director
5 Hill Park Estate,
Alexander Graham Bell Marg,
Malabar Hill, Bombay 400 006

SHARE CAPITAL

Authorised		Rs.
1,80,00,000	Equity Shares of Rs. 10/- each	18,00,00,000
1,00,000	11% Cumulative Redeemable Preference Shares of Rs. 100/- each	1,00,00,000
10,00,000	Unclassified Shares of Rs. 10/- each	1,00,00,000
		20,00,00,000
Issued, Subscribed and Paid-Up		
*59,51,100	Equity Shares of Rs. 10/- each	5,95,11,000
30,000	11% Cumulative Redeemable Preference Shares of Rs. 100/- each fully paid up (free of Company's tax but subject to deduction of taxes at source at the prescribed rates)	30,00,000
		6,25,11,000

*Note:

Out of this, 59,50,000 Equity Shares of Rs 10/-each were allotted for consideration other than cash in terms of a Scheme of Amalgamation.

Present Issue of Convertible Mortgage Debentures

NOW OFFERED FOR SUBSCRIPTION TO THE PUBLIC FOR CASH AT PAR IN TERMS OF THE PROSPECTUS

1,40,000	11% Convertible Mortgage Debentures of Rs. 500 each	7,00,00,000

BANK OF BARODA
10/12, Bombay Samachar Marg,
Bombay 400 023.

CANARA BANK
Frere Road, Bombay 400 001.

BANK OF INDIA
70/80 Mahatma Gandhi Road,
Bombay 400 023

AGENT AND TRUSTEES FOR HOLDERS OF THE DEBENTURES

SYNDICATE BANK
Bombay Zonal Office,
Maker Tower No."E",
Cuffe Parade, Colaba,
Bombay 400 005.

UNDERWRITERS

The Debentures offered to the Public for subscription for cash at par in terms of the Prospectus have been fully underwritten by the following:

Names and Addresses of Underwriters/Brokers

(A) **INSTITUTIONS, INSURANCE COMPANIES, ETC.**

Industrial Development Bank of India, Jolly Maker Chambers, No. 1,

Amrit Lal Bajaj & Co., 606 Kailash, 26, Kasturba Gandhi Marg, New Delhi 110 001.

Behari Lal & Co., Stock Exchange Building, Asaf Ali Road, New Delhi 110 002.

Bharat Bhushan & Co., H-45, Connaught Place, New Delhi 110 001.

J. C. Mehta & Co., 308, Dreamland, 1/18-B Asaf Ali Road, New Delhi 110 002.

Jalan & Co., Stock Exchange Building, Asaf Ali Road, New Delhi 110 002.

Jasvantlal Chhbtalal & Co., Bhupen Chambers, Dalal Street, Bombay-400 023

Kantilal Madhavdas & Co., 28, Stock Exchange Central Building, 1st floor, Bombay Samachar Marg, Bombay 400 023.

L. R. Munjal & Company, 46, Delhi Stock Exchange Association Bldg. Asaf Ali Road, New Delhi 110 002.

L. K. Panday, Maharashtra Bank Bldg, 45/47 Apollo Street, Bombay 400 023.

Lewis & Jones, Bank of Baroda

FINANCIAL HIGHLIGHTS

The following figures from the audited accounts serve to highlight the consistent improvements recorded by the Company in profitability and growth.

(Rupees in lacs)

Year ended	Paid up Equity Share Capital	Share-holders Funds (Capital and Reserves)	Sales proceeds	Net Fixed Assets	Gross Profit	Profit after tax	Equity Dividend (%)
1	2	3	4	5	6	7	8
30th June 1974	80	503	3099	602	200	180	9
30th June 1975	170	651	4731	840	268*	216*	9
30th September 1976 (15 months)	595	720	6508	1165	365*	251*	3
30th September 1977	595	954	6898	1451	433	293	15
31st December 1978 (15 months)	595	1444	12207	2503	1016	657	27.5
31st March 1979 (3 months)	595	1673	3621	2559	298	228	—

NOTES:

1. Figures for the year ended 30th June 1974 and 30th June 1975 relate to the position prior to amalgamation with Mynylon Limited with effect from 1st July 1975. The subsequent figures relate to the Amalgamated company named Mynylon Limited which was later re-named as Reliance Textile Industries Limited.
2. For the sake of comparison, the estimated recoverable Export Incentives of Rs. 176 lacs and Rs. 192 lacs have been included in figures of gross profit and profit after tax for the year ended 30th June 1975 and 30th September 1976 respectively.

Nagindas Chhaganlal, 68, Stock Exchange New Building, Bombay Samachar Marg, Bombay 400 023.

Porecha Brothers, 19, Stock Exchange Building, Bombay Samachar Marg, Bombay 400 023.

Bhagya & Co., 139, Gandhi Bazaar, Near Canara Bank Bangalore 560 004.

Jahgirdar & Co., 21, Second Main Road, Seshadripuram, Bangalore 560 020

Lokkur & Company, Kempegowda Road, Bangalore 560 009.

Satyaprakash & Co., Indian Bank Building, 3rd Floor, Kempegowda Road, Bangalore 560 009

Vijai & Company, 9, Eleventh Main Road, Malleswaram, Bangalore 560 003

C. Mackertich, 7, Lyons Range, Calcutta 700 001.

Chandravadan Desai, P-39/40 Ezra Street, Calcutta 700 001.

Dayco, 7, Lyons Range, 3rd Floor, Calcutta 700 001.

G. M. Pyne, 14, India Exchange Place, Calcutta 700 001.

Khandelwal Bros, Wardley House,

G. Y. Bhandare, 35/36, Stock Exchange Building, 4th Floor, Hamam Street, Bombay 400 023.

Hemendrakumar Kesharichand Shah, Stock Exchange Central Building, 2nd Floor, Apollo Street, Bombay 400 023.

Hiralal Thakordas Nanavati, 15, Stock Exchange Central Building, Fort, Bombay 400 023.

Ishwarlal Kantilal & Co., Stock Exchange, New Annexe Building, 5-A Hamam Street, Fort, Bombay 400 023.

Jagmohan Ganeshbhai Damani, 15-A, Hamam Street, Bombay 400 023.

Jamnadas Khushaldas & Co., Stock Exchange Central Building, 2nd Floor, Apollo Street, Fort, Bombay 400 023.

Jasvantlal Chhaganlal, 29, Bhupen Chambers, 1st Floor, 9/10, Dalal Street, Bombay 400 023

Jayantilal N. Patel, 86, Stock Exchange, New Building, Apollo Street, Fort, Bombay 400 023

Jitendra Harjivandas, 50, Stock Exchange New Building, Bombay Samachar Marg, Fort, Bombay 400 023

PROSPECTS AND PROFITABILITY

The Company's gross profit for the 15 months period ended 31st December, 1978 amounted to Rs. 1016 lacs and the net profit amounted to Rs. 657 lacs representing an annual return of 137% and 88% respectively on the paid-up equity capital of Rs. 595 lacs. The Company paid a dividend of 27.5% on the equity capital and 11% on preference capital of Rs. 30 lacs (amounting to Rs. 166 lacs) for the year and ploughed back Rs. 830 lacs in business comprising Rs. 430 lacs retained profits and Rs. 340 lacs depreciation.

The Company's turnover during the first six months of the current year has amounted to Rs 72 crores representing an increase of about 50% over the average corresponding turnover of the preceding year as a result of benefit from the expansion project completed in 1978. Barring unforeseen circumstances, the company expects to improve its future profitability significantly as a result of the benefits of completion of the above referred projects and to be able to pay reasonable dividend on its capital.

The Debentures would be secured by an Equitable Mortgage by deposit of Title deeds and Hypothecation of movable assets both present and future to be created in favour of Syndicate Bank as Agents and Trustees for the holders of the Debentures ranking pari passu with the charge created and/or to be created in favour of the Institutions and Banks as mentioned in the Prospectus.

APPLICATIONS AND ALLOTMENT

Applications must be made in the Application Form accompanying the Prospectus in accordance with the instructions contained thereon and if not so made will be liable to be rejected.

Application for Debentures must be in the name of individuals, limited companies, statutory corporations or statutory institutions AND NOT in the name of a trust (unless the trust is registered under any Societies Registration Act or any other applicable trust laws and is authorised under its constitution to hold Debentures in a company), minor, firm, non-resident foreign natio-

ver the years. The suitings manu-
actured by the Company are well
ccepted in the market and the com-
any has emerged as a well-known
anufacturer of suitings in the country.
he Company presently manufactures
uitings from purchased yarn. How-
ver, the Company is finding it diffi-
ult to secure adequate quantity of
ood quality yarn having a wide range
f colours and blends from other mills.
or this purpose, the Company propo-
es to instal 12,500 spindles and other
elated equipment for manufacture of
an-made fibre yarn on the worsted
ystem adjacent to its existing mills
t Ahmedabad. Since this is for the
Company's captive consumption, the
ompany would save sales tax to the
une of Rs. 52 lacs per year besides
eing ensured of quality product and
egular supply. The Company also
proposes to instal certain balancing
equipment in its processing house as
well as a computer, diesel generator,
effluent treatment plant and certain
other equipment at its existing mill at
Naroda.

TERMS AND CONDITIONS OF CONVERTIBLE MORTGAGE DEBENTURES

The terms and conditions of the Convertible Mortgage Debentures (hereinafter referred to as "the Debentures") inter-alia are as under:

i. The Debentures are issued for cash at par by public subscription in units of Rs.500 (Rupees five hundred) each. An amount of Rs. 250 per Debenture is payable on application and the balance of Rs. 250 on allotment.

ii. The Debentures will carry interest at the rate of 11% per annum (subject to deduction of income tax at the rate for the time being prescribed under the Income tax Act, 1961 or any statutory modification or re-enactment thereof for the time being in force) and such interest will be payable by equal half-yearly payments on 30th June and 31st December in each year, the first of such half-yearly payment to be made for the proportionate period from the date immediately next following the date of closure of Subscription list to 31st day of December following.

iii. The Debentures will, subject to the option of conversion attached thereto as hereinafter provided, be redeemable at par in five equal annual instalments on the expiry of the 8th,

Bombay 400 005.
NATVARLAL HIRACHAND AMBANI
7, Alt View, Altamount Road,
Bombay 400 026.
RAMANLAL CHATURBHUJ PATEL
68, Sett Minar,
Dr G. Deshmukh Marg,
Bombay 400 026.
RASIKLAL LALLUBHAI MESWANI
21, Krishna Kunj,
Walkeshwar Road, Bombay 400 006.
MUKESH DHIRUBHAI AMBANI
Usha Kiran,
15 Carmichael Road,
Bombay 400 026.
SECRETARY
VINOD MANSUKHLAL AMBANI
Jagdish Niwas,
Syed Abdulla Brelvi Road,
Bombay 400 001.
ADVOCATES AND SOLICITORS
KANGA & CO.
Ready Money Mansion,
43, Veer Nariman Road,
Bombay 400 023.
DAVE & CO.
7/10 Botawala Building,
Horniman Circle, Bombay 400 023.
AUDITORS
RAJENDRA & CO.
Masketi Mahal, Lohar Street,
Bombay 400 002.
CHATURVEDI & SHAH
404, Maker Bhavan No 3,
21, New Marine Lines,
Bombay 400 020.
BANKERS TO THE COMPANY
SYNDICATE BANK
Syndicate Bank Building,
Sir Phirozshah Mehta Road,
Bombay 400 001.
BANK OF BARODA
10/12, Bombay Samachar Marg,
Bombay 400 023.
CANARA BANK
Frere Road, Bombay 400 001.
GRINDLAYS BANK LIMITED
90, Mahatma Gandhi Road,
Bombay 400 023.
THE ANDHRA BANK LIMITED
Nanavati Mahalaya,
18 Homi Mody Street, Fort,
Bombay 400 023.
INDIAN OVERSEAS BANK
Gulabi House,
111/115 Kazi Sayed Street,
Mandvi, Bombay 400 003.
BANKERS TO THE ISSUE
SYNDICATE BANK
Syndicate Bank Building,
Sir Phirozshah Mehta Road,
Bombay 400 001.

bay 400 020.

Life Insurance Corporation of India, Yogakshema, Jeevan Bima Marg, Bombay 400 020.

Unit Trust of India, 13, Sir Vithaldas Thackersey Marg, Bombay 400 020.

Industrial Finance Corporation of India, Bank of Baroda Building, 16, Parliament Street, New Delhi 110 001.

General Insurance Corporation of India, Industrial Assurance Building, Churchgate, Bombay 400 020.

National Insurance Company Limited, 3, Middleton Street, Calcutta 700 001.

The New India Assurance Company Limited, New India Assurance Building, 87 Mahatma Gandhi Road, Bombay 400 023.

The Oriental Fire & General Insurance Company Limited, Jeevan Udyog Bldg., A 25/27, Asaf Ali Road, New Delhi 110 001.

United India Insurance Company Limited, SIAC Building, 24, Whites Road, Madras 600 014.

Industrial Credit and Development Syndicate Limited, Syndicate House, Manipal 576 119.

(B) OTHERS

Bhupendra Champaklal Devidas, Bhupen Chambers, Dalal Street, Fort, Bombay-400 023.
D. S. Purbhoodas & Co., Stock Exchange Bldg, Apollo Street, Fort, Bombay-400 023.
Harkisondass Lukhmidass, Stock Exchange Building, 5th floor, Bombay Samachar Marg, Bombay 400 023.
Jamnadas Morarjee & Co., 5-A Hamam Street, 1st floor, Bombay 400 023.
Upendra M. Dalal, 100 Stock Exchange New Building, Apollo Street, Bombay 400 023.
Champaklal Bhailal Chokshi, Manek Chowk, Near Share Bazar, Ahmadabad 380 001.
Gordhandas N. Gupta, Anandji Kalyanji Building, Opp. Dhanasuthar Pole, Relief Road, Ahmedabad 380 001.
Nareshchandra Lalbhai Parikh, Manek Chowk, Ahmedabad 380 001.
Place, Siddons & Gough (Private) Ltd., 8 Lyons Range, Calcutta 700 001.
Stewart & Co. 14, India Exchange Place, Calcutta 700 001.

Prabhudas Lilladher, Stock Exchange Building, 5A Hamam Street, Bombay 400 023.
Valji Bhimji & Co., 24, Stock Exchange Central Building, Dalal Street, Fort, Bombay 400 023.
Vinod Kumar & Co., A-6, Connaught Place, New Delhi 110 001.
Chimanlal Lalbhai, 2286, Manek Chowk, Ahmedabad 380 001.
Chinubhai Chimanlal Dalal, Mahurat Pole, Naka Manek Chowk, Ahmedabad 380 001.
Popatlal Harilal Khandwala & Co. Rupawala Building, Manek Chowk, Ahmedabad 380 001

Shah Kalyanbhai Mayabhai, 2242, Mahurat Pole, Manek Chowk, Ahmedabad 380 001.
M. Nanjappaiah Jahgirdar, 205, Cavalry Road, Bangalore 560 042.
Brijnath Khandelwal & Co., 13, India Exchange Place, Calcutta 700 001.
M. M. Murarka & Co., Stock Exchange Building, 7, Lyons Range, 3rd Floor, Calcutta 700 001.
H. P. Mehta & Co., 304, Surya Kiran, 3rd Floor, Kasturba Gandhi Marg, New Delhi 110 001.
Surinder Rode & Co. 1st Floor, 21-B, Bara Bazar Marg, Rajinder Nagar, New Delhi 110 060.
Amarchand Ratanchand Jhaveri, 26, New Stock Exchange Building, Bombay Samachar Marg, Bombay 400 023.
Batlivala & Karani, Union Bank Building, Dalal Street, Fort, Bombay 400 023.
Chimanlal J. Dalal & Company, 107, Stock Exchange New Building, Dalal Street, Fort, Bombay 400 023.
Dhirajlal Maganlal Sons, Stock Exchange (Central) Building, Apollo Street, Fort, Bombay 400 023.

Harish Chandra Gutt & Co., 45/47, Bombay Samachar Marg, Bombay 400 023.
Jayant Amerchand Kalidas, 5-A Hamam Street, Bombay 400 023.
Jayantilal Khandwala & Sons, Room No. 6, Stock Exchange Building 5-A, Ambalal Doshi Marg, Bombay 400 023.

Kaiki J. Khambatta, Central Stock Exchange Building, 3rd Floor, Share Bazar, Fort, Bombay 400 023.
Lallubhai Ranchhoddas, Bhupen Chambers, 9, Dalal Street, Fort, Bombay 400 023.
Morwanjee Bomanjee Dalal, Allahabad Bank Building, Apollo Street, Bombay 400 023.

Range, Calcutta 700 001.
Santosh Kumar Kejriwal, 23/24, Radhabazar Street, Calcutta 700 001.
Arkay & Co., 30, Stock Exchange, Asaf Ali Road, New Delhi 110 002.
Raj. Paul Chadha & Co., Delite Cinema Building, Asaf Ali Road, New Delhi 110 002.
Dewan Chand & Co., Block 10, Street 3, Devnagar, Karol Bagh, New Delhi 110 005.
Harbans Singh Mehta & Co., 33, Regal Building, Parliament Street, New Delhi 110 001.
R. K. Chugh & Co., 6 & 54, Stock Exchange Building, Asaf Ali Road, New Delhi 110 002
Raja Ram Bhasin & Co., Jewan Mansion, 8/4, Desh Bandhu Gupta Road, New Delhi 110 055.
R. K. Relan & Co., United India Life Building, F, Connaught Place, New Delhi 110 001.
Sikander Lal & Co., 55, Delhi Stock Exchange Building, Asaf Ali Road, New Delhi 110 001.
V. N. Bhasin & Co., A-88, Defence Colony, New Delhi 110 024
P. B. Afzulpurkar, 4-5-195, Sultan Bazar, Hyderabad 500 001.
Govind Das Shrikishan Agrawal, 97, M. T. Cloth Market, Indore 452 002.
Santosh & Co., 29, Dhenu Market, 1st Floor, S.G.S I T.S. Road, Indore 452 003.
Kothari & Sons, Kothari Buildings, Nungambakkam High Road, Madras 600 034.
Paterson & Co., Vanguard House, 3rd Floor, 11/12, Second Line Beach, Madras 600 001.
Subramaniam & Co., 13/14, Second Line Beach, Ground Floor, Madras 600 001.
Venkataraman & Co., 165, Linghi Chetty Street, Bombay Mutual Annexe, Madras 600 001.
Balubhai Tribhovandas Parekh, Stock Exchange Central Building, 2nd Floor, Dalal Street, Fort, Bombay 400 023.
Chandravadan Bhaichand Muchhala, Stock Exchange Central Building, 3rd Floor, Hamam Street, Bombay 400 023.
Chimanlal Maneklal, 45, Tamarind Street, 1st Floor, Fort, Bombay 400 023.
Dalal & Broacha, No. 29, Stock Exchange Central Building, 1st Floor, Dalal Street, Bombay 400 023.
G. K. Fozdar, 85, Stock Exchange New Building, Apollo Street, Bombay 400 023.

K. Motiram Vakil, Stock Exchange Central Building, Dalal Street, Bombay 400 023.
Kantilal Ishvarlal, 100, Stock Exchange New Building, Apollo Street, Bombay 400 023

Kantilal P. Broker, 2208, Manek Chowk, Ahmedabad 380 001
L. K. S. Murthy & Co., No. 17, Third Floor, Kempegowda Road, Bangalore 560 009.

M. J. Patel, 107, Stock Exchange New Building, Bombay Samachar Marg, Bombay 400 023.
M. K. Choksey & Co., Bank of Maharashtra Building, 45-47, Bombay Samachar Marg, Bombay 400 023.
Maganlal T. Vora, 23, Bhupen Chambers, 1st Floor, Dalal Street, Fort, Bombay 400 023.
Mangaldas Keshavlal, Stock Exchange Central Building, 3rd Floor, Dalal Street, Bombay 400 023.
N. M. Parikh, 11, Stock Exchange New Building, 1st Floor, Fort, Bombay 400 023.
Nagardas Ravji, Stock Exchange Central Building, Dalal Street, Bombay 400 023.
Nalin V Shah, 11, Mezzanine Floor, Stock Exchange Central Building, Bombay 400 023.
Narendra M. Dalal, 18, Stock Exchange Central Building, Dalal Street, Bombay 400 023.
Narbheram Harakchand, Bhupen Chambers, Dalal Street, Fort, Bombay 400 023.
Pankaj Ishwarlal Kapadia, 35/36 Stock Exchange Central Building, 4th Floor, Hamam Street, Fort, Bombay 400 023.
Rasiklal Maneklal & Co., 16, Stock Exchange Central Building, Bombay Samachar Marg, Bombay 400 023.
S. D. Jhaveri, 100, Stock Exchange New Building, Ground Floor, 62, Bombay Samachar Marg, Bombay 400 023
S. M. Shah, 91, Stock Exchange Building, Bombay Samachar Marg, Bombay 400 023.
Suresh F. Gundaria, 87, Stock Exchange Building, Bombay Samachar Marg Bombay 400 023.
Trambaklal Ratilal Parekh & Son, 5A, Hamam Street, Stock Exchange Building, Fort, Bombay 400 023.
V. B. Desai, Bhupen Chambers, Dalal Street, Fort, Bombay 400 023.
V. D. Vakil, 94, Stock Exchange New Building, Bombay Samachar Marg, Bombay 400 023.
Vinay M. Shah, 59, Bazargate Street, Bombay 400 001.

made only by Indian nationals resident in India and must be for a minimum of Two Debentures or multiples thereof Application Forms duly completed together with the amount payable on application at the rate of Rs.250/- per Debenture must be lodged before the close of the subscription list with any of the Bankers to the Issue named in the Prospectus or any of their offices mentioned in the Application Form and not to the Company or to the Managers to the Issue. For further instructions, please read the Application Form carefully. In the event of oversubscription of the public issue of the Debentures, the maximum number of the Debentures to be allotted to an applicant will be restricted to 25 unless the applicants in the lower category have been fully satisfied and the basis of allotment shall be settled in consultation with the Stock Exchange, Bombay.

An applicant should submit only one application (and not more than one) for the total number of Debentures required. Applications may be made in single or joint names (not more than three). Two or more applications in single and/or joint names will be deemed to be multiple applications if the sole and/or the first applicant is one and the same. The Board reserves the right to reject, in its absolute discretion all or any multiple applications.

The application form shall contain a provision irrevocably authorising Syndicate Bank to act as the agent of the applicant for accepting the deposit of title deeds by way of an Equitable Mortgage to secure the Debentures and Syndicate Bank acting as Agents and Trustees for the benefit of the Debentureholders to whom allotment will be made in respect of the security to be created in its favour as stated in the Prospectus. Any application for Debentures not containing such an irrevocable authority, shall be deemed to be incomplete and will be liable to be rejected.

PROSPECTUS AND FORM OF APPLICATION

Copies of the Prospectus and Application Forms may be obtained from the Registered Office of the Company, Underwriters, Brokers to the Issue, Managers to the Issue, and Bankers to the Issue named in the Prospectus or from any of the offices of the Bankers to the Issue mentioned against their names in the Application Form.

ONLY..VIMAL

Issue Opens on
Wednesday, 3rd October, 1979

MANAGERS TO THE ISSUE

The Merchant Banking Division of
THE INDUSTRIAL CREDIT AND INVESTMENT CORPORATION OF INDIA LIMITED
163, Backbay Reclamation, Bombay 400 020.

PRESSMAN

are set to rise continuously would be to distribute public money to the private sector. This is slippery ground for Mrs Thatcher as a campaign to preserve national assets for the state may unite the unions and important sections of the public.

Finally, the preoccupation with trade unionism has led academics to study the psychology of strikes. Two psychologists from the University of Sheffield, Dr N. Nicholson and J. E. Kelly, in a paper presented to the British Association, found five themes in varying degree in most strikes. They are:

The strike as a protest: In this the strike is led from behind by an angry work-force.

The strike as warfare : Here the focus and direction of a dispute is most clear and the attitudes and values of each side assume symbolic and highly charged significance for each side. (A recent example was the Grunwick dispute where the employer, a naturalised Anglo-Indian from Bangalore refused to give unions access to his plant to find out whether his workers wanted to join unions. He was backed by Conservatives, including an MP, while striking workers were joined or helped by trade unionists from all over the country and even Labour ministers. After two years of protest demonstrations, which produced some violence, and court actions, which went up to the House of Lords, the employer won).

The strike as strategem: It occurs because there can be little or no meaningful bargaining without the power realistically to threaten to impose sanctions on the other party.

The strike as group process: The emotional hold that some union members or leaders have on the workers give them a disproportionate influence on the outbreak of strikers.

The strike as organisational change: This has often a bandwagon or snowball effect with the strikes picking up issues as it gathers momentum and tends to prove exciting to union officials as it also radicalises the conservatives on both the union and mangement sides.

Public enterprises : a case for professional management

Dr S.P. Vijaya Saradhi & A. Shankaraiah

The performance of our public sector enterprises continues to often receive the attention of economic analysts. In this piece, Dr S. P. Vijaya Saradhi, Professor and head of the department of Commerce and Business Management, Kakatiya University, Warangal, and Mr A. Shankaraiah, lecturer in that department, analyse the causes which have been hampering the successful working of these undertakings. They advocate that these enterprises should be managed professionally for the various reasons listed by them.

THERE IS no gainsaying the fact that in the developing economies of today efficient management has come to be recognised a *sine qua non* for achieving economic progress and prosperity through the efficient functioning of the various economic and social institutions which are used as the vehicles of economic and social development. With the growing social ideals and urges, management has attained a distinctive status and emerged as a leading institution in itself. The urge for the development of good managers is recognised as a part of the social change resulting from the interaction of factors like changes in technology, theories of development and political ideologies.

In its 28th report, the Committee on Public Undertakings remarks: "It is distressing that in this age when industrial science and management science and echniques have advanced very much, mismanagement and lack of scientific control are rampant and the activities of the public enterprises are carried on in a haphazard manner".

In India, public sector has emerged as a powerful tool of economic development and social change consequent upon the passing of the Industrial Policy Resolutions[1]. Over the successive five-year Plans, the public sector has witnessed an enormous growth[2] and has emerged as an important lever of economic growth.[3] It has set before itself the distinctive task of meeting the challenges of inadequate infrastructure and shortages of investment and managerial and technological skills. Public enterprises in India have come to be recognised as important instruments for reducing regional imbalances, increasing employment opportunities, providing unique entrepreneurship and translating the concept of a welfare society into a functioning reality.

The purpose of this article is to highlight the need for professional managers for the management of public enterprises in India and their management horizon against the backdrop of the kind of goals set for the public sector. In order to examine the professional manager's role in a clearer perspective, we propose to present, at the outset, the conceptual aspects of professional management.

complex exercise

To attempt at a comprehensive definition of professional management[4] is a difficult and complex academic exercise. To be brief, professional management may mean "management—of an enterprise or organisation—with a demonstrable proficiency and excellence by an employee-manager who by his education, training, experience and value system practises managerialism as a philosophy and ideology". A professional manager has as experimental approach to information and phenomena. He is a knowledgeable worker and in order to practise his profession he must be cognisant of the historical, sociological, political, economic and legal parameters. He is capable of shifting his modes of action from intuitive and centric modes[5] to rational and radio modes where emphasis is given to group objectives, decentralisation of authority and responsibility, two-way communication, exerting maximum control with minimum effort and logical arrangement of groups for the establishment of a rational organisation.[6] With self-discipline and training of mind, he observes a code of ethics and conduct in the discharge of his managerial functions. He is expected to be "above-board" profits imbued with a sense of social responsibility[7]. A professional manager should function within the parameters laid down by the policymakers and planners of his country.

behavioural norms

Having presented the content of professional management, we propose to outline the objectives of public enterprises since they constitute a set of norms for managerial behaviour and action. Some of the important objectives are :

(i) To develop backward regions and to correct regional imbalances.

(ii) To provide basic infrastructure facilities for the growth of the economy.

(iii) To reduce disaprities in income.

(iv) To increase employment opportunities on an increased scale.

(v) To develop self-reliance in technologies.

(vi) To implement labour-intensive technology wherever appropriate.

(vii) To increase exports and earn foreign exchange to ease the pressure on balance of payments.

(viii) To generate surpluses.

(ix) To produce mass consumption goods at cheap prices.

(x) To provide an image of a model employer.

While the above objectives relate to surplus output and social preferences such as employment, income distribution, export promotion or import substitution and secondary effects concerning the promotion of skills or the development of certain regions, it is important to recognise that the public sector is motivated to fulfil the objectives of state policy and to act as an agency for social change which the state desires. The forms of organisation[8] which are structured in order to carry out the objectives brought in their wake certain difficulties which led to managerial ineffectiveness. For instance, the departmental form of organisation contributed to too much of centralisation with inadequate delegation of powers, thus curbing the initiative and flexibility on the part of the public enterprise managers. Also it resulted in "red tape, inadequate service and insensitivity to consumer needs". Even in the case of corporation form of organisation, which enjoys an extent of autonomy and financial freedom, the managers did not possess the necessary freedom and flexibility since they were required to carry out orders from the ministry to which the corporation was attached. It is interesting to note that even where the joint stock company form of organisation was adopted in order to promote necessary freedom in the management of finance and autonomy in administration, the constitution and powers of the board[9] and its area of action showed that they did not promote incentive to efficiency or inclination to economy on the part of the managers. There was also a general reluctance to delegate powers from ministry to board and from board to managing director which impaired efficient functioning and quick decisions on the part of the managers.[10]

misconstrued notion

At this stage it is relevant to examine how the bureaucratic style of functioning and the misconstrued notion about "accountability" have affected the success of management in public enterprises. There is a heavy concentration of government personnel of the rank of IAS and other categories of central services on account of appointments or deputations to the executive positions. They bring in them a bureaucratic culture[11] which by its adherence to a code of discipline, formality, subordination, orderliness and conformity has contributed to shifting responsibility and inaction. While they attempt to dump on the organisation rules, procedures and systems of their parent institutions, their mental attitude is totally unsuited to the tasks assigned to them. Added to this, management by the "manual" has become a standard managerial style in many public enterprises.

As to the practice of accountability,[12] there is no clear cut demarcation between autonomy on the part of the enterprises and control by parliament in practice.[13] The practice of managerial accountability to the parliament through the minister concerned has resulted in instances of unnecessary interference by the latter creating an adverse effect on initiative and morale of the manager.

conflicting objectives

The preceding discussion has brought to light the absence of clear-cut objectives, organisation weaknesses like weak leadership, bad supervision, poor and unrealistic controlling, non-interest of top executive, lack of special management training to the deputed official, problems of authority relations, poor communication and lack of coordination. Second, the managers in the public sector face problems in accomplishing objectives which many a time are conflicting in nature.[14] Besides the paradox of the conflicting objectives, public sector managers have faced functional and operational problems. Delays in project preparation, construction and operation, which have become a common feature, have necessitated cost revisions and caused long gestation periods. There have also been problems of high levels of inventory and unutilised capacity in addition to defects in the development of suitable product-mix and marketing strategy which have all contributed to low profitability. Also in many enterprises policy and procedure manuals do not exist. There are instances of financial mismanagement and lack of set standards for the appraisal of management work.

It has been on record that ever since the public sector emerged in order to fulfil the objectives laid down for it for the promotion of economic development, it has suffered from poor operational performance on account of inefficient management among other factors. The quality and price of goods manufactured have not in many cases given full satisfaction. The huge size of public enterprises and their multi-dimensional character have created problems of inter-unit, inter-divisional and inter-departmental conflicts.[15] While role conflict is inescapable in large public enterprises, its magnitude is wide on account of a turbulent and clogged environment, let alone dynamic under the veil of welfare objectives.

Though public enterprises have turned the corner about two years ago in the matter of utilisation of capacities, improving production and reducing losses (they have shown deterioration in these respects since last year), they have to improve their profitability and accomplish the objective of generation of surpluses and subserve the resources intentions of the development plans. Competent professional managers are needed to fulfil the economic objective of generation of surpluses at one extreme and the social objective of ensuring employees' welfare and consumer satisfaction under its avowed adherence to the concept of public interest at the other extreme.

different approach

The approach of the public sector manager should be different from that of the private sector manager in decision areas such as choice of technology, location, product-pricing and employment. Some of his decisions relate to balanced growth of regions, investment in projects having long gestation periods and low level of profits which require the competence of a professional manager. The presence of the professional manager is needed not only at the top level but also at the different functional levels in the areas of production, finance, materials and marketing.

The need for professional management should be recognised in public enterprises also because of the absence of business culture in them. Professional management lays down in clear terms the objectives of the organisation, organise the human and material resources of the enterprise and evaluates the performance in terms of the accomplishment of objectives of the organisation. Public enterprises need "an industrial culture which is full of innovation, enthusiasm, creativity, morale, commitment and performance-generating policies and practices."

The public enterprise manager is expected to be sufficiently commercial in background, initiative and decision-making ability. At the same time, he should be concerned with public interest that must fit into his decision-making system and the requirements of wider national interest. He should be result-oriented. These requirements call for a professional manager whose ethical standards and moral values may function as motivating force. The management of public enterprises must effectively apply the concept of participation for enhancing the level of employees' identification with their organisation and developing a feeling of commitment in them for their performance. The rising expectations of the people about enterprises, increasing tendency of public evaluation of their performance, growing role of customer satisfaction, greater need for dynamic marketing and competitive selling emphasise the need for professional managers.

Public enterprises of today are facing the problems of change which demand resilience, pragmatism, creativity and search for new adjustments with society and do not require restrictions, prescribed methods, conformity. Public enterprises need the services of persons who have the capacity to manage differences between diverse groups and should have the ability of a "bringing together" and a creative "working through" towards a new consensus for promoting authentic communications, mutual trust and support, and genuine respect for individual differences which are very essential for managing conflict and disagreement effectively.[16]

sound systems

Public enterprises should build up sound distribution systems for consumer goods and rural inputs such as fertilisers and develop a network of mechanism for collecting information about agricultural and forest produce, minerals, etc. Public enterprises should extend their operations to the neighbouring rural economy for providing managerial, technological and material inputs in addition to internationalisation of their operations. For accomplishing the broad socio-economic objectives of the public sector, the professional manager can provide a significant leadership role.

In order to achieve better standards of production and consumption for the well-being of the community, there is need for creating maximum resources with an accent on optimisation of productivity and efficiency. There should be management evaluation at all levels for effective measurement of innovations and change for the improvement of the existing state of affairs. Professional management is basically involved in ensuring a meaningful and productive relationship between economic growth and human welfare. In order that the managers of public enterprises are to become more effective, they should improve personal skills, strive for professional excellence, work for greater interaction between the organisation and the community, develop interest in people and better appreciation of the role of human values and shed inhibitions regarding the dignity of labour.

Notes and References

1. The Industrial Policy Resolutions of 1948 and 1956 have banned the entry of private sector into certain industries, reserved certain specific industries exclusively for the state and also facilitated state ownership in a progressive manner.

2. While the number of public enterprises increased from 25 in the I Plan to 129 in the Vth Plan, the investment grew from Rs 1,560 crores to Rs 24,297 crores respectively. Also the share of public sector in industrial investment increased from 46.4 per cent in Ist Plan to 75 per cent in Vth Plan period while there was corresponding decline from 53.6 per cent in Ist Plan to 25 per cent in Vth Plan period in private sector.

3. The public sector enterprises have a majority share in production turnover in about 55 sub-sectors of industrial and service activities. Out of these, in good many cases like coal mining, newsprint, petroleum extracting and refining, non-ferrous metals, the public sector's share is cent per cent.

4. Specifically the term professional management is applicable to the upper echelons of management. Yet it coordinates and integrates a number of functions for an organisation and each one is a significant management field in itself, eg., materials management, personnel management, financial management, production management, marketing management, international management, management information services, research and development and public relations.

5. These two modes of action are reflected in the promotion of personal interest above that of the group or organisation, one way communication, centralised decision-making, authoritarian leadership. etc.

6. In fact, the professional manager should have the ability and liberty to act in all modes to meet differing situations. He is expected to possess the skill that is necessary to narrow down

the risk of decision-making and ability to plan for the future.

7. The concept of professional management insists on duty towards profession, and it should adopt certain distinct trends like responsiveness to government and its policy, turning the company's resources to community and social development.

8. They are: 1. departmental undertaking, 2. public trust, 3. public corporation, and 4. joint stock company.

9. The board is dominated by officials representing various ministries, in their ex-officio capacity. The ex-officio members and the managing directors/general managers are frequently changed which is not conducive to efficiency.

10. It is also true that there has been a feeling that a public enterprise should be managed by its concerned ministry irrespective of its organisational form. This feeling of umbilical relationship of public enterprise management has denied the public sector manager the needed freedom and autonomy which are essential for the efficient working of the enterprise.

Findings of committees and independent research studies have revealed also that decisions in all forms of public enterprises are neither independent nor quick. Needs are rarely anticipated and often recognised only after crises forces realisation.

11. Max Weber believed that bureaucracy is inherent in all formal organisations. According to him the purely bureaucratic type of administration is capable of attaining the highest degree of efficiency and is the most rationally known means of carrying out imperative control of human beings. The technical virtues of bureaucracy are precision, predictability, technical know-how, continuity, coherence, strict subordination in a set of hierarchy and the reduction of friction and of material and personnel costs. Young social scientists regard bureaucracy with favour because it is rational.

12. The problem of public accountability comprises control of public enterprises directly by the parliament and indirectly through the minister concerned and also making the management responsible and answerable to the minister and through him to parliament.

13. The manager of a public undertaking will be under the administrative and financial control of the minister concerned and he will not have a free hand in discharging his duties. Due to this, sometimes there will be unnecessary interference by the ministry in day to day working of the enterprise leading to delays, overcaution, lack of confidence and impairment of initiative and drive on the part of the managers of the public sector undertakings.

14. For example, the objective of profitability and maximisation of surplus conflicts with the objectives of producing mass-consumption goods at cheap prices, developing backward regions in order to correct regional imbalances and provision of increased employment opportunities to earn the image of a model employer. Also the objective of increasing exports to earn foreign exchange in order to ease the pressure on balance of payments conflicts with the aim of generating surpluses. Secondly though public enterprises wish to base their requirement on the criterion of competence, they have to provide employment to local people on priority basis as a matter of state policy.

15. For example, Steel Authority of India, Fertilizer Corporation of India, Hindustan Machine Tools Limited, Bharat Heavy Electricals Limited, etc.

16. The role of the manager can be visualised as a dynamic interplay between environmental forces and pressures operating on the managers (the E Variables) and the forces originating from within the manager, his values, personality and aspirations (the I Variables)

Notes

1. Douglas Mcgregor : The Professional Manager.

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TRADE WINDS

Output of Public Sector

Public sector units under the department of Heavy Industry achieved in August, 1979 a total production valued at Rs. 92.58 crores, 89 per cent of the target of Rs. 103.46 crores. It shows an increase of Rs 6.29 crores over the production of Rs 86.29 crores in July, 1979 and an increase of 15 per cent over the production in August, 1978. In addition to this, the out-turn of Engineering Projects (India) Limited for August, 1979 was Rs 11.81 crores and Rs. 79 lakhs more than the production in August, 1978. The production in July, 1979 was Rs. 8.61 crores. Cumulatively, the production in the first five months of 1979-80 was Rs. 410.68 crores, 86 per cent of the target of Rs. 475.74 crores.

Actual turnover from plants of the Bharat Heavy Electricals Limited during August, 1979 was Rs. 53.04 crores, 94 per cent of the target and Rs. 3.96 crores higher than the production in August, 1978. The production in July, 1979 was Rs. 48.60 crores. Production in all units of the Hindustan Machine Tools Limited in August, 1979 was Rs. 15.20 crores as against Rs. 14.88 crores in July 1979 and Rs. 11.74 crores in August, 1978. The Heavy Engineering Corporation Limited reached in August, 1979 an output of Rs 5.66 crores as against Rs. 4.20 crores in July, 1979.

The production of Mining and Allied Mechinery Corporation Limited for the month has been of Rs. 2.42 crores, 76 per cent of the target of Rs. 3. 17 crores and Rs 0.37 crores higher than the production of August 1978. The production in July, 1979 was Rs. 2.38 crores. The other enterprises which have registered better performance than in July are Burn Standard Limited, Braithwaite and Co. Limited, Scooters India Limited, Bharat Wagon and Engineering Co. Limited and Bharat Brakes and Valves Limited.

Excise Exemption to Patch Prints

The patch prints (cinema films), which are intended exclusively for the entertainment of children or for educational purposes, have been exempted from payment of central excise duty. An exemption notification in this respect has been issued by the government of India. In respect of full length films of the aforesaid two categories of films, an exemption already exists.

Committee on Sugar Excise

The government of India has set up a committee under the chairmanship of Dr. J.C. Sandesara, Professor of Industrial Economics, University of Bombay, to critically evaluate the operation of the excise rebate scheme for sugar and to advise the government on measures necessary to achieve the objective behind the scheme. The committee is to submit its report by December 31, 1979.

The committee will shortly issue a questionnaire to all concerned with the sugar industry to elicit information on its terms of reference. The committee has, however, advised all those who may like to give information or views on relevant points to write to the Secretary, Central Excise Sugar Rebate Scheme (Review) Committee, 501, Sahyog '58', Nehru Place, New Delhi-110019.

New Project in Iraq

India has secured the 12th project in Iraq in the current year with the award of the West Bank Trunk Sewer in the Baghdad city to a New Delhi construction firm. This project is valued at Rs 12 crores. Last month, another Indian construction firm, The Hindustan Construction Company Private Limited, was awarded the contract for building the Daqooq Chai Bridge, valued at Rs 6 crores. With the award of these two contracts the value of projects secured by India in 1979 up to now stands at Rs 163.5 crores.

It may be recalled that the earlier 10 projects secured this year are in various fields like construction of flyovers, bridges, culverts, housing complexes, besides the prestigious council of ministers building. In 1978, Indian firms had secured eleven projects in Iraq valued at Rs. 200 crores. Thus twentythree projects valued at approximately Rs. 360 crores, are now being executed by Indian firms in Iraq.

Hindustan Shipyard

The state-owned Hindustan Shipyard, Visakhapatnam, has made a profit of about Rs. 4.5 crores for the year 1978-79. This was stated by Mr. S. Anandaram, chairman and managing director, while addressing the annual general meeting of the shipyard recenlty. He said the net profit comes to Rs. 306.32 lakhs after providing for depreciation and interest. Mr Anandaram said the shipyard has been able to declare a dividend of six per cent on the paid-up capital amounting to Rs. 115.37 lakhs for the third year in succession.

Mr Anandaram informed the meeting that the shipyard has developed a new design for standardised family of ships in the range of 14,000 to 27,000 DWT. Its versatility facilitates speedy construction at less cost. The efficacy of the design has been successfully tested at one of the most reputed model test basins in the world, viz., Hamburg in West Germany. The shipyard has diversified its activities into new fields including manufacture of davits and folding hatch covers. He added that the shipyard achieved the highest turnover on ship repairs amounting to about Rs 427 lakhs—a record so far. The number of ships repaired during the year was 96.

Expansion Project

The chairman said that during the year two "Pioneer" class vessels of 21,344 DWT each were built in the yard. The total cost of production including shiprepairs came to Rs. 2680 lakhs as against Rs. 2584 lakhs during the previous year. A contract for building three ships was signed with the Shipping Corporation of India during the year. He said the centre is considering the proposal of the British consultants for development of the shipyard at a cost of Rs. 36 crores to step up the production to 7 to 8 ships a year. The shipyard has so far built and delivered 77 vessels aggregating to

7,81,408 DWT covering a wide range from ocean-going cargo liners to all types of specialised craft. These include sophisticated Naval Survey Vessels, Survey Vessels for Oil and Natural Gas Commission. On the ship repairs side, 875 ships have been repaired, earning a foreign exchange of Rs.105.82 lakhs.

Assets of Top Twenty MRTP Houses

The total value of assets of the group of top twenty MRTP companies (large industrial houses) in the country recorded a marked increase from Rs 3071.98 crores as on April 1, 1972 to Rs. 5401.70 crores as on March 31, 1977. During the period 1972 to 1977, the overall percentage of increase in the assets of these industrial houses was 75.8 per cent.

According to the figures worked out by the department of Company Affairs, Birla overtakes from Tata, as the first of the top 20 large industrial houses on March 31, 1977, showing an increase from Rs. 589.40 crores in 1972 to Rs. 1070.20 crores in 1977 with 81.6 per cent increase over the assets of 1972. Tata's assets recorded an increase of 66.6 per cent from Rs. 641.93 crores in 1972 to Rs. 1069.28 crores in 1977. The assets of Mafatlal, which ranks No. 3 increased by 55.4 per cent from Rs. 183.74 crores in 1972 to Rs. 285.63 crores in 1977. J.K. Singhania increased its assets by 120.1 per cent over the period of five years from Rs. 121.45 crores in 1972 to Rs. 267.31 crores in 1977. Thapar maintained an increase of 58.6 per cent from its assets of Rs. 136.16 crores in 1972 to Rs. 215.92 crores in 1977. I.C.I. increased its assets by 55.3 per cent from Rs. 135.21 crores in 1972 to Rs. 209.97 crores in 1977.

Scindia recorded an increase by 85.7 per cent from Rs. 107.73 crores in 1972 to Rs. 200.04 crores in 1977. Oil India, which ranks eight in position showed an increase of 92.2 per cent over five years from Rs. 104.04 crores in 1972 to Rs. 199.95 crores in 1977 followed by Bhiwandiwalla whose assets recorded an increase by 312.6 per cent from Rs. 45.91 crores in 1972 to Rs. 189.44 crores in 1977.

Bangur increased its assets by 50.3 per cent from Rs. 125.26 crores in 1972 to Rs. 188.24 crores in 1977. Larsen and Toubro showed an increase of 135.33 per cent in its assets from Rs. 79.03 crores in 1972 to Rs. 185.91 crores in 1977. Shri Ram, which ranks twelve position, increased its assets by 48.9 per cent recording an increase from Rs. 120.77 crores in 1972 to Rs. 179.77 crores in 1977.

A.C.C. increased its assets from Rs. 134. 36 crores in 1972 to Rs. 168.86 crores in 1977, showing a rise of 25.7 per cent. Kirloskar recorded an increase by 86.2 per cent in its assets from Rs. 86.46 crores in 1972 to Rs. 160.96 crores in 1977.

Hindustan Lever showed an increase by 84.4 per cent from Rs. 77.87 crores in 1972 to Rs. 143.59 in 1977. Khatau (Bombay) showed an increase by 84.0 per cent from Rs. 75.44 crores in 1972 to Rs. 138.88 crores in 1977. Sarabhai, which ranks seventeen position, recorded an increase by 62.3 per cent from Rs. 84.44 crores in 1972 to Rs. 136.96 crores in 1977. Walchand showed an increase by 33.5 per cent from Rs. 99.47 crores in 1972 to Rs. 132.81 crores in 1977.

Macneill and Magor increased its assets from Rs. 64.80 crores in 1972 to Rs. 132.55 crores in 1977, showing an increase by 104.6 crores over a period of five years. Mahindra and Mahindra increased its assets by 114.5 per cent from Rs. 58.49 crores in 1972 to Rs. 125.49 crores in 1977.

The table below gives the Assets in 1972 and 1977 of the Top 20 Large Industrial Houses Ranked by Size of Assets in 1977 (As per registration under Section 26 of the M.R.T.P. Act as on June 30, 1978)

Sl. No.	Name of the house	Assets (Rs. crores)		Percentage increase in 1977 over 1972
		1972	1977	
1.	Birla	589.40	1070.20	81.6
2.	Tata	641.93	1069.28	66.6
3.	Mafatlal	183.74	285.63	55.4
4.	J. K. Singhania	121.45	267.31	120.1
5.	Thapar	136.16	215.92	58.6
6.	I.C.I.	135.21	209.97	55.3
7.	Scindia	107.73	200.04	85.7
8.	Oil India	104.04	199.95	92.2
9.	Bhiwandiwala	45.91	189.44	312.6
10.	Bangur	125.26	188.24	50.3
11.	Larsen and Toubro	79.03	185.91	135.3
12.	Shri Ram	120.77	179.77	48.9
13.	A.C.C.	134.36	168.86	25.7
14.	Kirloskar	86.46	160.96	86.2
15.	Hindustan Lever	77.87	143.59	84.4
16.	Khatau (Bombay)	75.44	138.82	84.0
17.	Sarabhai	84.44	136.96	62.3
18.	Walchand	99.47	132.81	33.5
19.	Macneill & Magor	64.80	132.55	104.6
20.	Mahindra and Mahindra	58.49	125.49	114.5
	Total	3071.98	5401.70	75.8

Banks in the South

Development of banking, with particular reference to the flow of institutional credits to the priority sectors, will be reviewed at a meeting of the Regional Consultative Committee for Nationalised Banks, to be held at Pondicherry on October 8, 1979. The meeting will be presided over by the central Finance minister, Mr H.N. Bahuguna. The meeting will also review the activities of the Agricultural Finance Corporation and the role of nationalised banks in making credits available to agricultural and other priority sectors.

Other subjects to be discussed at the meeting include bank expansion programme of the nationalised banks in the southern region, the progress of the differential rate of interest and providing credit to small-scale industries. The meeting will be attended by the governor of the Reserve Bank of India and the chief executives of the major nationalised and private sector banks operating in the area. Representatives of the state governments of Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and the union territories of Lakshadweep and Pondicherry are expected to participate at the meeting.

Exports by Small Scale Sector

The small-scale sector exported goods worth Rs 888.50 crores, 16.2 per cent of the total exports from the country in 1977-78. The small industries contributed bulk of exports in items such as marine products (83%), cashew kernels and cashewnut shell liquid (91%), woollen hosiery (90%), synthetic products, garments, made-ups and knitwear (80%), sports goods (100%), E.I. tanned hides and skins (60%), finished leather and leather products (60%) and agarbatties (84%). In non-traditional items the exports were worth about 40 per cent. Since 1971-72 there has been a six fold increase in exports from the small sector.

Nutrition for Children

The centre has suggested to states to give greater emphasis to the delivery of health and nutrition components to children below three years of age and also to arrange for therapeutic food for severely mal-nourished children. This is one of the major points brought out in a review of the Integrated Child Development Services projects which are operational and have so far covered more than 5,500 villages. The need for expeditious arrangements for drinking water supply in the project areas is also another major point for action.

Surveys in respect af health and nutritional status of children and mothers have been carried out by the All India Institute of Medical Sciences and certain other medical colleges involved in the projects. The surveys showed that there had been a substantial improvement in the health and nutritional status of children in most of the projects. The progress of ICDS projects and the International Year of the Child programmes were among the subjects listed for discussion by the conference of state Social Welfare ministers held in New Delhi on September 22. The deputy prime minister Mr Y.B. Chavan inaugurated the conference.

Udyog Mitra

A high-powered industrial assistance body—Udyog Mitra—is being set up under the aegis of SICOM. This is to short-circuit the delays, red-tape and any other inconveniences experienced by the present and future entrepreneurs in Maharashtra. The Udyog Mitra is said to be on the lines of the INDEX-B in Gujarat. The Industrial Extension Bureau of Gujarat is a trouble shooting committee which coordinates several agencies and facilitates faster clearance of problems which are faced by the industrialists.

The Udyog Mitra committee will have members drawn from SICOM, MSFC, MIDC, MSEB, and later even from MSSIDC and from the prevention of water pollution board. Thus there will be more coordination among these agencies and the unnecessary harassment caused to the industrialists will be either removed totally or minimised. The committee is likely to have wider powers to make its functioning effective. It is learnt that the District Industrial Centres will be the focal points of industrial development and the general managers will be vested with more powers. The SICOM primarily takes interest in medium and large industries so as not to overlap its functions with other bodies whose main areas of interest are the small scale industries. These administrative changes are being brought about on the lines suggested by Ramakrishna committee. The committee had also suggested formation of the state bureau of industrial approvals.

Small Savings

Small savings collections in the country registered a significant increase in the first four months of the current year. During the period April-July, 1979 the gross collections stood at Rs 867.73 crores and net at Rs 238.45 crores, against the gross collections of Rs 711.66

Raunaq & Company Pvt. Ltd.

NOTICE

It is hereby notified for the information of the public that Raunaq & Company Pvt. Ltd., have made application to the Central Government in the Department of Company Affairs, New Delhi, under sub-section (2) of Section 22 of the Monopolies and Restrictive Trade Practices Act, 1969, for approval for the establishment of a new undertaking for manufacturing and marketing of pulp and paper unit. The turnover is expected to be Rs. 318 lacs at full capacity. Other particulars of the proposed new undertaking are as under :

(1) Name of the proposed undertaking :
A new name will be given to this undertaking.

(2) Name(s) of persons of authority/authorities proposing to establish the new undertaking. Where it is a body corporate furnish details of its management structure together with those of the proposed undertaking :
Raunaq & Company Pvt. Ltd., New Delhi. The Company is managed by the Managing Director subject to Superintendence control and directions of the Board of Directors.

(3) Capital structure of the applicant person or authority and of the proposed undertaking :
Authorised.
Equity Shares : 23 lacs
Preference Shares : 2 lacs
Total : 25 lacs
Proposed share capital : 166 lacs

(4) Proposed location of the New undertaking :
In one of the backward districts of Punjab :

(5) Brief outline of the cost of the Project the Scheme and Source of finance :
The estimated cost of the project is Rs. 415 lacs which is proposed to be financed by share capital and long term loans.

Any person interested in the matter may make a representation to the Secretary, Department of Company Affairs, Government of India, Shastri Bhawan, New Delhi within 14 days from the date of publication of this notice intimating his views of the proposals and indicating the nature of his interest therein.

(S.S. Kanwar)
Managing Director

Dated this day of fifth September 1979,
Regd. Office : 14-15/F Connaught Place,
New Delhi 110001.

crores and net of Rs 135.44 crores in the corresponding period last year. The improvement in the net collections is thus about 76 per cent over the previous year.

Small savings instrument comprise post office savings bank deposits, post office time deposits, cumulative time deposits, recurring deposits, national savigs certificates, national savings annuity certificates and national development bonds. Two-thirds of the net collections in each state are ploughed back in the state as loans. Besides, additional loans are paid to a state to the extent of 2.5 per cent of its net collections for every five per cent increase in its percentage of net to gross collections over the all-India percentage.

During 1978-79, a target of Rs. 460 crores had been fixed for small savings collections. The actual collections amounted to Rs. 859.40 crores. During the current year, a target of Rs. 650 crores has been set for the collections.

Pilot Projects

Numerous steps have been taken to popularise small savings. These include undertaking pilot projects in rural areas for intensive savings activities organising training programmes for extra-departmental branch postmasters and field staff, setting up of special committees of public sector units on regional basis for promotion of pay roll savings scheme, appointment of more agents for the Mahila Pradhan Kshetriya Bachat Yojana, and making saving bank facilities available in many of the mobile post offices.

Details of the deposits made under the small savings schemes durings the four-year period from 1974-75 are as under:

(Rupees in crores)

Year	Collections	
	Gross	Net
1974-75	1341.68	325.78
1975-76	1552.30	393.98
1976-77	1697.52	405.34
1977-78	2039.45	552.64

Crop Prospects

The Crop Weather Watch Group of the ministry of Agriculture and Irrigation has assessed the beneficial effects of the encouraging rainfall in the last few days in some states in the north as well as in south India. The states in the north are Punjab, Haryana and Himachal Pradesh, and in the south are Tamil Nadu, Karnataka, Kerala, the south coastal area and Rayalaseema area of Andhra Pradesh and the Marathwada area.

This rainfall would be beneficial for the paddy crop in the Punjab and Haryana and the bajra crop everywhere.

The recent rainfall would also be useful for sowing gram and mustard in the north and for rabi jowar in the south. The Crop Weather Watch Group expects the south peninsular area to receive further rainfall and the Punjab and Haryana areas to receive normal rainfall. Such rainfall would be beneficial for sowing the rabi crop in the north and will augment the minor irrigation potential in the tanks in the south.

Plan for Rabi Crops

As a part of the alternate crop plan strategy drawn up in the wake of the recent drought, a cropping pattern for the ensuing rabi has been suggested by the ministry of Agriculture and Irrigation. The measures recommended for normal rabi sowing in areas having sufficient rainfall and irrigation facilities for the wheat crop are timely sowing with optimum input application. In the command areas of reservoirs with insufficient water supply for wheat cultivation, the farmers could grow rapeseed, mustard, gram, peas and barley.

The Crops Division of the ministry has suggested that in the "dry" areas of Rajasthan, Haryana, Uttar Pradesh and Madhya Pradesh the sowing of gram and Taramira oilseed could be undertaken in substitution of the jowar and bajra crops which have failed. In certain low-lying areas of Harayana, Punjab, Bihar, Uttar Pradesh and Madhya Pradesh, gram, peas, lentil and kesari could be grown, after the initial paddy crop. For the eastern states of Assam, West Bengal and Orissa the cultivation of rabi moong in rice fallows has been suggested.

Catch Crops

To meet the situation of paddy failure in the upland areas of Orissa, the practice of growing moong as a "catch" crop, in between two crops of paddy, could be popularised.

The Crops Division has recommended that the practice of growing arhar in Bihar in September may be encouraged. Further, since the productivity of maize in Bihar is greater than that of wheat, more areas could be covered with rabi maize. The Crops Division has suggested that in certain areas of Rajasthan, Haryana, Uttar Pradesh, Bihar and Madhya Pradesh gram sowing could be undertaken in the last week of September or early October by conserving the available moisture.

In paddy-growing areas where residual moisture is generally less, crops like rapeseed, mustard, gram and barley could be grown. It has been pointed out that in certain areas of Haryana, Punjab, Rajasthan, Madhya Pradesh and Bihar, where electricity is available for only a short period everyday, it is sufficient to soak the soil only and grow

HEAVY ENGINEERING CORPORATION LIMITED

(A Government of India Enterprise)

FOUNDRY FORGE PLANT
MATERIALS MANAGEMENT DIVISION
P. O. Dhurwa : Ranchi-834004.
No. PUR/FFP/78/310023/01/IL/40(79)
Dated, the 5th Sep. '79.

GLOBAL TENDER NOTICE

Sealed Global Tenders are invited from reputed manufacturers for the supply of "CHARCOAL PIG IRON". Reputed manufacturers/suppliers in G.C.A./RPA Countries may Quote directly or through their Agents in India against A.U.L.

Tender documents with detailed specifications etc. can be obtained from the offices of the Branch Manager, HEC Ltd., 77 Park Street, Calcutta-700016 (India), the Branch Manager, HEC Ltd. Bajaj House, 3rd Floor, Nehru place, New Delhi-110019 and the **Deputy Manager (Puschase)/FFP**. on payment of Rs. 50/- (Rupees Fifty) only on all working days excluding Sundays and Holidays. Request for mailing tender documents will be entertained only on receipt of the cost of tenders. The tenders will be available for sale upto 31-10-79 between 2.00 PM to 4.30 PM.

Tenders should be sent in duplicate in sealed cover addressed to the Manager (Materials), Foundry Forge Plant, HEC Ltd., P.O. Dhurwa, Ranchi-834004, (Bihar), INDIA, superscribing on the envelope, the "tender notice no. due date". The tenders will be received upto 1.00 P.M. on 7-11-79 and opened at 3.00 P.M. on the same day in the presence of attending tenderers.

Manager (Materials) does not undertake any responsibility for late receipt/loss or tender papers during transit and also reserves the right to reject any or all the tender without assigning any reason.

R. S. Mathur
Deputy Manager (Purchase)/FFP.
davp 763(125)/79

crops such as gram, peas and barley. Another important suggestion made is that where moisture availability is not sufficient to support wheat as a 'pure' crop, mixed cropping of wheat with mustard or gram could be undertaken. The ministry has evolved this detailed crop pattern to maximise production in rabi season to make up for the likely losses in the kharif crop.

MSFC

Maharashtra State Financial Corporation (MSFC) has started its drive for assisting more small industries particularly in developing and backward regions in right earnest from the very first quarter of the year April-June, 1979. Over the corresponding period last year, the corporation has shown improvement of 42 per cent in number of units assisted, 33 per cent in amount of loans sanctioned and 55 per cent in disbursements made.

In five months ending August, 1979, as many as 642 units have been assisted with loans amounting to Rs 10.24 crores and disbursements upto Rs 7.05 crores as against 506 units, sanctions of Rs. 8.48 crores and disbursements of Rs. 5.30 crores in corresponding period last year. It will be seen from the above that MSFC is making systematic drive for sanctions, disbursements and even in recoveries throughout the year instead of making a rush to reach the target in the closing months of the year, 32 per cent in units assisted, 30 per cent in sanctions and 25 per cent in disbursements against target of 2000 units, sanctions of Rs 34 crores and disbursement of Rs 24 crores for the current year 1979-80 have already been reached, sixtyfive per cent of the amount due in recoveries, both in principal and interest in the first five months of the year have already been realised. All regions have fared appreciably better than the last year.

Rupee-Pound Exchange Rate

The Reserve Bank of India has revised its rates for the purchase and sale of pound sterling for spot delivery with effect from September 15, 1979. The new rates are as under: Selling: £. 5.6180 per Rs. 100 (corresponding to Rs. 17.80 per £); Buying : £. 5.6497 per Rs. 100 (corresponding to Rs. 17.70 per £) The spot buying and selling rates have been so fixed as to give a middle rate of Rs. 17.75 per pound, as compared to the earlier middle rate of Rs 18.00. The Reserve Bank will continue to buy forward sterling for delivery upto nine months on monthly option basis at a discount of £. 0.0060 per Rs 100 per month on the spot buying rate of Rs 100=£. 5.6497.

The bank will continue to purchases US Dollar, Deutsche Mark and Japanese Yen both spot and forward on monthly option basis—for periods upto twelve months in the case of US Dollars and upto six months in the case of Deutsche Marks and Japanese Yen—as before at rates determined on the basis of London market cross rates.

Names in the News

Mr R. V. Raghavan, formerly Chief Finance Manager, Glaxo Laboratories (India) Ltd., Bombay has been appointed Finance Director-Designate of Burroughs Wellcome & Co. (India) Private Ltd., Bombay, with effect from August 1, 1979.

NORTHERN RAILWAY

TIME TABLE NOTICE

The salient features of the Northern Railway Time Table which comes into force from 1st October 1979 are as under:

Diversion and Change in days of Trains

(i) All trains on Degana-Phullera section viz. 207 UP/208 Dn, 209 UP/210 Dn. and 1 BMF/2 BMF will run via the new alignment between Thathana Mithri and Gudha opened to passenger traffic from 12.9.79.

(ii) 156 Dn Tinsukia Mails ex-New Delhi will run via GAL (New Yamuna Bridge) instead of via Delhi Jn and Delhi Shahdara.

(iii) 153 Up/154 Dn. Jayanti Janta Expresses will run to and from Delhi via Delhi Shahdara instead of via New Delhi/GAL (New Yamuna Bridge).

(iv) 167 Up/168 Dn Vikram Shila Express trains will run to and from Delhi Jn, via Delhi Shahdara instead of via New Delhi and GAL (New Yamuna Bridge).

(v) 179 Up Weekly Express will run from Tatanagar on Saturday instead of Friday and 180 Dn. will run from Varanasi on Friday instead of Wednesdays.

Runs Curtailed

Runs of 107 Dn/108 Up Bundelkhand Express will be curtailed between Mughalsarai and Varanasi. These trains will now run between Varanasi and Jhansi only as per following abstract, timings.

108				107
13.30	d	Varanasi	a	10.25
15.42	a	Janghai	d	09.09
15.50	d		a	09.01
17.55	a	Allahabad	d	07.15
18.25	d		a	06.45
05.40	a	Jhansi	d	19.35

Stoppages Withdrawn

Train No.	Station
29 Up	Sandila
2 LJH	Rohira Ghallughara
2HS/3 HS	Naloi Barwa
55 Up/56 Dn	Garhmuktesar Bridge

Changes in Running of Through and Sectional Carriages

(i) One 3-tire sleeper coach will be introduced to run between Bombay Central and Moradabad via Delhi by 23 Dn/148 Dn-147 Up/24 Up trains commencing from 1-10-79 ex. Bombay Central and from 3-10-79 ex. Moradabad.

(ii) One composite I & II sleeper coach running between Delhi and Jabalpur by 14 Dn/3 Up-4 Dn/13 Up trains will be cancelled.

(iii) One 3 tier sleeper coach running between Bombay V. T. and Patna Jn. by 4/8-7/3 trains will be cancelled.

(iv) Two II Class coaches running between Howrah and Allahabad by 3 Up/4 Dn Mails will be cancelled.

(v) One 3 tier sleeper coach will run between Howrah-Gaya-Bombay V.T. by 3 Up/4 Dn Mails.

(vi) One composite I & II sleeper will run between Howrah-Jabalpur-Bombay by 3 Up/4 Dn Mails.

(vii) One II class coach presently running between Delhi and Sahibganj on 14 Dn/13 Up Upper India Express will run upto Bhagalpur only.

Important Changes in Train Timings

177 Dn will arrive/leave New Delhi at 18.25/19.20 hrs. as against 16.00/16.45 and will arrive Jammu Tawi at 8/5 hrs. as against 5/-hrs.

156 Dn will leave New Delhi at 22/15 hrs, as against 22/-hrs.
154 Dn/168 will leave Delhi at 19/05 hrs. as against 18/35 hrs.
121/123/125 will arrive New Delhi at 13/20 hrs. as against 12/50 hrs.
137 will arrive Hazrat Nizamuddin at 19/5 as against 18/5 hrs.

35 Up will leave Kalka at 21/25 as against 21/10 hrs. and will be arriving/leaving Amritsar at 5.5/6/35 as against 4.50/6.05 hrs. and will arrive Pathankot at 9/30 hrs. as against 9/05 hrs.

58 Dn will arrive New Delhi at 20/05 hrs. as against 20/25 hrs.
163 Up will leave Allahabad at 17/40 as against 18/20 hrs.
108 Up will leave Varanasi at 13/30 hrs. as against 14/19 hrs.
97 Up will arrive Barmer at 5/25 hrs. as against 4'10 hrs.
98 Dn will leave Barmer at 22/20 hrs. as against 22/55 hrs.
96 Dn will arrive Jodhpur at 20/40 hrs. as against 20/30 hrs.

For detailed information kindly consult Northern Railway Time Table, October, 1979 issue available for sales at all important stations.

CHIEF OPERATING SUPERINTENDENT

The Calcutta Electric Supply Corporation (India) Limited

Extracts from the Review by the Chairman, Mr. Bhaskar Mitter at the Annual General Meeting held on 27th September 1979 at Calcutta

When you received the company's Annual Report last year you did so as stockholders of the sterling Company, The Calcutta Electric Supply Corporation Ltd. This year's Annual Report goes to you as shareholders of the new rupee Company—The Calcutta Electric Supply Corporation (India) Ltd. This change in name marks a memorable stage in the long corporate history of CESC, and signifies the successful culmination of the process initiated some time ago to Indianise this vital public utility undertaking. This year's Annual Meeting, the first Annual Meeting of the new Indian Company, is a landmark in the Company's progress. Since we last met we have passed another significant landmark—the inauguration of work on the new Rs. 119 crore Titagarh Project to which I refer later.

Sales of Electricity

A total of 2869 million units were sold in the period under review representing a slight decrease of under 1% compared with 2890 million units sold during the previous year. Sales to domestic, commercial and medium and low voltage industrial consumers went up by about 4% but this increase was offset by a reduction of about the same order in sales to high voltage industrial consumers. Despite the slight reduction in unit sales, revenue from the sale of electricity increased by approximately 9% from Rs. 82.59 crores to Rs. 89.89 crores. The additional revenue accrued mainly from the increase in our rates for High Tension consumers with effect from June 1978, and Low Tension consumers from July 1978. These increases were necessitated to neutralise the additional cost arising out of the levy of Central Excise Duty by the Government of India with effect from March 1978. Owing to increased fuel costs there was also an increase in the Fuel Surcharge rates. The additional revenue earned on both these counts was offset by increased expenditure on account of Excise Duty and Fuel.

Power Supply in the Calcutta Area

Throughout the year under review, we had to contend with heavy restrictions on our import of power both from the WBSEB and the DVC, as a result of which the power position in Calcutta area continued to be unsatisfactory. We are fully conscious of the tremendous hardships our consumers have had to undergo as a result of the shortage in the supply of power. The expectation of obtaining some relief from 120 MW unit No. 3 at Santaldih coming into stream had to be pushed back as the unit could not be put into stable commercial operation till April this year. The position would have been even more serious but for some assistance provided from time to time by Orissa and the North Regional Electricity Board to the DVC/WBSEB systems. With the recent commissioning of two 20 MW gas turbines at Kasba by WBSEB and with the prospect of their 120 MW Unit No. 4 at Santaldih being pressed to service around the middle of next year as well as the 200 MW Unit No. 5 at Bandel few months thereafter, it is anticipated that there will be some improvement in the position.

The Company's own generating stations struggling under adverse conditions were, by and large, able to maintain the performance that was expected of them, despite the handicaps of their venerable age, shortage of coal faced from time to time and the damage suffered by our coal handling plants, particularly at the New Cossipore Generating Station, as a result of the unprecedented floods of September, 1978.

New Projects

You will be pleased to learn that sanctions have been obtained for long term loans for our Titagarh Project from all the participating Financial Institutions and from the State Government. Bridge loans amounting to Rs. 10.60 crores have so far been received pending finalisation of the loan agreements. Orders have been placed for the import of Turbo Generators and 33 kV switchgear from the UK, and also for Boilers and other items of equipment which will be obtained in India. Our Titagarh Project was formally inaugurated on 22nd April this year by the State's Chief Minister, Shri Jyoti Basu, who laid the foundation stone at a very well attended function at the Project site.

Piling operations are in progress and every effort is being made to co-ordinate multifarious other activities to ensure smooth execution of the Project. We are greatly indebted to the State Government for the support and help we are receiving from them in all directions but for which it would not have been possible for us to make the progress we have so far been able to achieve.

With regard to the Company's application for financial assistance of Rs 9.50 crores for installation of new boilers at Mulajore Generating Station and other capital expenditure, bridge loans amounting to Rs 3.77 crores have been obtained pending finalisation of the loan agreements, which are expected to be executed shortly. The first boiler is now on trial operation and the second one is expected to be ready before the end of the year.

NB:— This statement does not purport to be a report of proceedings of the Annual General Meeting referred to above.

I.T.C. Limited

ITC SUBSERVING NATIONAL INTERESTS IN INDIA'S TOURISM DEVELOPMENT

"With all humility, I would submit, that the assured political and economic Independence we have achieved is meaningless without the stability that economic development provides. I believe that such stability and economic development will be achieved rapidly and effectively with pragmatic balance between central planning and a market economy; for the latter is the surest road to managing inflation and showing real care and concern for the Public."

SHRI A. N. HAKSAR

A. Economic Audit-ITC subserving National Interest-In India's Tourism Development:

Some years ago ITC Corporate Economic Philosophy to attain its Commercial Objectives was expressed as follows : **"In economic terms, whereas Profit is the true measure of performance rather than the only central inspiration and motive, ITC Philosophy is to subordinate and enmesh the objectives of the Company with those of the Nation, in the conviction that the enterprise will progress to the extent that our society and country prosper"**.

In furtherance of this Philosophy, ITC committed itself to high risk investments in certain areas that the Government had identified as within the Priority Sector. One such major diversification of ITC has been in the Government sought priority development of India's Tourism-cum-Hotel Industry.

ITC entered the Tourism Hotel Industry as recently as September 1975; without any previous experience. I humbly submit that in this short span of time more has been achieved than would be reasonable to expect even by the most exacting Shareholders. This has been possible entirely due to the work ethos, selflessness and dedication of all those that have been and are a part of the ITC Hotels Division, despite many odds including those sometimes engineered and others that have been seldom obtrusive. It is this story of development that I would like to relate to you.

B. Tourism and National Economy–A Means of Rapid Economic Development:

To begin with I would like to identify important dynamics of this ITC diversification so that the Shareholders can judge for themselves: **FIRSTLY**: The prospects for growth of this ITC enterprise within India and Overseas. **SECONDLY**: The importance of their investment in the larger perspective interest economically desirable contributions for a priority development of the National Economy. These dynamics are:

B 1. Re: Tourism–Economic Audit:

1. **ONE**: The composite Tourism Industry including Hotels represents the fastest growing and largest element of what economists call Invisible Trade and its Earnings.

2. **TWO**: Today, Tourism, including Hotels, is the second largest Industry in the World with a rapid rate of growth and is predicted to overtake Oil in the coming decade.

B2. Re: Tourism—An Economic Development Weapon:

1. **ONE**: Almost every country of the world has used Tourism most effectively as a powerful economic weapon for rapid development of their National Economy for the Public Good.

2. **TWO**: The Tourism Hotel Industry has an in-built expansion dynamic through its internal cash generations on slow depreciating assets, as a result of which growth can be generally financed without undue diversion of resources from other priority areas.

B3. Re: Tourism–Opportunity for India:

1. **ONE**: The prospects in India for Tourism growth as an economic weapon are enormous. India's share, based on all arrivals, of World Tourism is around 0.3%.

2. **TWO**: India is a relative newcomer in the International Tourist Market. And has, just reached a take-off stage which can be expended rapidly with more investment and increasing competition between a larger number of organisations in the Industry such as ITC.

3. **THREE**: Fortunately in India we have a flexible, sound and balanced Economic Policy for the Hotel Industry. A yet more open pragmatic approach by Government can only do extreme good for our country and its people.

TOURISM with its rate of growth, is predicted to soon overtake oil as the world's largest Industry. It represents the largest segment of invisible International Trade and Earnings. It generates its own resources for linkage inputs with surplus for other priority development. It represents for India, an appropriate, powerful economic weapon to develop the national economy with direct favourable impact on every identified National and Public Interest. For the development of TOURISM, India is gifted with its historic, cultural and natural endowments. All that is needed is the will, coupled with a pragmatic developmental approach.

C. Economic Audit–ITC in Tourism Hotel Industry–for National and Public Good:

Following upon the comments on the dynamics and the potential for growth, I would now like to do an Economic Audit highlighting the fitment between the furtherance of the National and Public Good on a broad front and the Company's enlightened self-interest in this major diversification.

1. ITC in Tourism Hotel Industry—Creating Employment:

A major motivation for ITC to diversify into Tourism Hotels was, that, as a combination of a Construction and Consumer Service Industry, it was labour intensive, particularly for the educated unemployed.

2. ITC in Tourism Hotel Industry—Aiding Rural Development and Cottage Industries:

The ITC Hotel Chain has encouraged Cottage Industries by using Handlooms for furnishings and curtaining, Handloom Carpets and Handicraft artifacts for decoration. The opportunity to have a possible domestic outlet combined with an export potential made it possible for ITC to promote Triveni Handlooms Ltd, which, even in its early stages, has provided over 200 families of Weavers a means of guaranteed work self-employment.

3. ITC in Tourism Hotel Industry—Generating Direct Self-Employment and Marketing Outlets for Small Sector Produce:

As Shareholders are aware, ITC have themselves, and through the promoters within the ITC Chain, encouraged very substantial investment in the shops and arcades in each of the Hotels. These have created a very large number of opportunities for self-employment and provided marketing outlets for the produce of the labour intensive small scale and cottage industry sectors.

4. ITC in Tourism Hotel Industry—Aiding the Small and Tiny Sector Development:

In keeping with its Philosophy of self-reliance through indigenous sources, ITC have relied predominantly on getting Hotel supplies and equipment fabricated in India.

5. ITC in Tourism Hotel Industry—Earning Foreign Exchange:

In addition to the socio-economic benefits already stated, ITC was attracted to Tourism because of its vast potential, second only to oil, to earn Foreign Exchange not in just small denomination of hundreds but in thousand/s of crores.

6. ITC in Tourism Hotel Industry—Aiding Extra Employment and Mobilising Exchange Resources:

ITC is already playing an active part and gearing its operations that will lead to employment opportunities overseas and the mobilisation of resources. This is moving in three dimensions: (1) **FIRSTLY**: Indian Nationals working and earning overseas, desirous of investing savings in India, have expressed confidence to do so in the ITC Hotel Chain, particularly upon being further reassured with the ITC Sheraton arrangement (2) **SECONDLY** : ITC are already in negotiations for providing Operating Services to overseas properties which will open employment opportunities to Indian Nationals; these in turn will also remit back funds (3) **THIRDLY** : The ITC Hotels Division Training Institute, which is to be expanded and opened to all, is developing a manpower resource extra to its own needs for Indian Nationals to seek opportunities abroad, thus also providing invisible foreign exchange earnings.

7. ITC in Tourism Hotel Industry—Aiding the Multiplier Catalyst:

The Tourism business has a wide relationship of forward and backward linkages including other components of the Industry.

It is estimated that for each unit of ITC investment and activity turnover, the multiplier impact will generate an extra 4/5 units of economic activity.

8. ITC in Tourism Hotel Industry—Aiding Regional Economic Benefits Distribution:

ITC, through its promoted WELCOMGROUP, has embarked on an ambitious programme for as wide a coverage of India and its Tourist attraction as is possible. Already the Chain provides the first phase coverage of India regionally divided between the four points of the compass.

9. ITC in Tourism Hotel Industry—Aiding Benefits of Competition:

I believe I can say without fear of contradiction that the entry of ITC in the Tourism Hotel Industry has brought about a new and keener sense of competition than has existed for many years.

D1. ITC in India's Tourism Development–the ITC Promoted Welcomgroup–Strategy and Progress:

I would now like to comment on the strategy for developing the ITC promoted WELCOMGROUP as an essential "Chain" in the Hotel business and report to you on the progress to date:

1. Welcomgroup—Indian Style Ethos

ITC did not have to go very far for inspiration to decide on the Ethos of the Welcomgroup Chain. The Chain Brand Name "Welcomgroup", its Symbol of the Indian Namaste greeting and welcoming with the humility of folded hands and the motto "We Enjoy People" synthesise the proverbially famous Indian hospitality and dedication to satisfy the guest though Service as the life spring of the Hotel Business.

2. Welcomgroup—A New Dimension Indian Product Ethos :

The Welcomgroup is a Chain **with a difference**. The most significant difference emerges from Pride in India and things Indian.

3. Welcomgroup—The People and Services —Extending the Helping Hand:

A pre-requisite to developing the Welcomgroup Chain has been the ITC Hotels Division strategy of **FIRSTLY**: Developing People and **SECONDLY:** Developing know-how, expertise and Hotel technology to be able to offer and market Services. In this pursuit the ITC Hotels Division has developed one of the largest and, certainly, the most outstanding group of some of the most competent Hoteliers in India between those that have joined ITC and those that have been trained and developed in house. The levels of competence that have been built up enable marketing of Services.

4. Welcomgroup—A Cooperative Enterprise with Uniqueness:

The people and Services just referred to have made possible the development of the welcomgroup as a Cooperative Enterprise between ITC and largely smaller scale independent private investment functioning collectively as partners. Association of ownership with the benefits of Professional Management through Technical and Operation Services ensures that in their own participation, they will remain businessmen in their own right. Also through the Welcomgroup Services, their investments will be both more productive and competitive with the existing and future Hotels Groups in India. Within the Welcomgroup the enlightened self-interest objectives of profit and growth are common to all partners.

5. Welcomgroup—Chain Product Mix and Uniqueness:

Welcomgroup is now rapidly being recognised as the Most versatile, widest and quality-wise the best Show Places Indian Hotels Chain both in our own country and overseas, as a result of the variety it offers, the value it provides specially for foreigners, in furtherance of its claim of "Giving India to the Foreign Traveller Better Than Anyone Else", the unforgettable and memorable Total Indian Experience they enjoy.

6. Welcomgroup—Progress—Market and Competitive Standing:

Before reporting to you on the Progress of the Welcomegroup I am happy to inform you that ITC and the Travel Corporation of India Hotels and Resorts (Private) Ltd, have signed an Agreement to augment the Welcomgroup Chain by working as partners to accelerate the rate of growth of Foreign Traffic coming to India. This joint endeavour already covers four properties of which three are in India and one overseas. Two of those in India will cater to Indian travellers and certain very special groups from overseas; the third is a new type of a unique resort. Two of them are in the Plan stage and the other two still under negotiation. For this I would like to thank and welcome TCI initative to the Welcomgroup family of equals.

7. Welcomgroup—Beyond the Shores of India

The question that now comes to mind is: "What about Welcomgroup extending abroad ? Research Surveys, depth Analyses and the examination of the examples of other Indian Chaines tend to show: (i) That such opportunities become possible more readily as a result of the Indian Chain having agreements in India with an International Hotel Chain, as a result of which confidence is created with overseas prometers in the assurance that International Standards and Technology have become available to the Indian Hotelier. Indeed, those that have had discussions with ITC have expressed this even as a condition (ii) That the basic areas open are : (a) In the third world fellow-feeling (b) In bilateral trade countries (c) where there are overseas Indian origin financiers (d) Where Indian finance is made available in cash and kind (e) When the combination of economics and quality are available from India (f) When existing business relationships and the possible ones can be treated as a package d eal (iii) That the most saleable commodity from India, because of manpower operating service economies, is the Management/Operating Contract with, or without, the extra assistance in the planning for the Hotel its facilities.

The ITC priority is clearly, first and foremost. to aid the development of India's Tourism and a firm consolidated base for Welcomgroup in India as the best and most professional Chain from which it can launch itself abroad. However, ITC has not been ignoring this aspect. Welcomgroup already has a Hotel coming up in Kathmandu (Nepal), hopes to be associated with another property in Nepal, is hopeful of the ITC/TCI negotiations in respect of Colombo, has letters of intent for the provision of Services for two resort Hotels in Libya and is seeking even greener pastures overseas.

8. ITC in India's Tourism Development—The Welcomgroup—Conclusion :

Finally on the Welcomgroup, while the progress has been rapid and credit worthy I must air a word of caution. ITC have established the Market Standing and Quality of the Chain as second to none in India. However, neither the quality nor the size of the Welcomgroup is enough by itself. The Palaces—Hotels—Resorts—Indovilles dotted all over the country have to have economically viable annual average occupancy.

Having put in these words of caution, I would like to say that our Shareholders need not be despondent. Their investment in Hotels is paying off and will make meaningful contributions to ITC Corporate Profit.

E. Competitive Marketing—The ITC-Sheraton Agreement—Activity Promoting Destination India:

Following these words of caution I would like to conclude today's topic by explaining how the ITC Hotels Division and the Welcomgroup Chain are attacking the problem of keeping the existing and the increasing number of Properties, widely dispersed over the country, filled with Foreign Tourists to which Market I will confine my remarks. **This brings me to COMPETITIVE MARKETING which, unfortunately, with few identifiable exceptions, has been relatively unknown in India even to the extent that the concept of "Marketing in Totality" is hardly understood, much less appreciated. I would also venture to say that COMPETITIVE MARKETING is today, and will be increasingly tomorrow, the key to : (1) The development of India's Tourism and (2) The source of well-being for the components and participants of the Tourism Industry in India which can really only flourish under the banner of the former.**

1. The Overall Marketing Challenge—Objectives—Promoting Destination India:

India is already far behind other, even very much smaller, countries of the world in the context of the Global Tourist Traffic of around 270 millions in 1978. The enormity of the Overall Marketing Challenge is almost mind-boggling. This is evident in the Objectives which are clearly: (i) India and its Tourism Industry must make itself and be more aggresively Competitive in the world scene, (ii) India's declining trend and share of only 0.3% has to be reversed and made to grow (iii) the existing level of Foreign Tourist arrivals of as little as one half million out of 270 millions has to be very rapidly enlarged.

This will require aggressive COMPETITIVE MARKETING.

2. Competition Between Countries—Promoting Destination India :

COMPETITIVE MARKETING in the International arena to make India more attractive is essential in the global picture of keen competition between countries for the Tourist Trade.

ITC's Hotels Division has been constantly gearing itself to Market India abroad more effectively. For this a major development has been the Agreement that ITC very favourably entered into with Sheraton for International Marketing and Reservation Services.

3. Market Research Analysis—For International Competitive Marketing—Promoting Destination India:

The ITC—SHERATION "International Marketing and Reservation Services" arrangement was indicated by and followed upon Market Research conducted for the ITC Hotels Division.

ITC's Marketing strategy, based on the Market Research Analysis, is a combination of: (i) Developing destination Local and Domestic business (ii) Creating unique products, such as those in Delhi and Agra, to market abroad as greater attractions (iii) Rapidly developing and expanding the Welcomgroup Chain with Sub-Chains and Sub packages to expand the total Market through larger number and wider interest offers (iv) Coordinated and cooperative functioning with Government Tourist Offices abroad, Air India and the other Airlines operating to and through (v) Selling-in to a wider group of the Travel Trade in India with equal "partnership" functioning with identified larger Indian Travel Agencies (vi) Marketing to and Public Relation with Foreign Travel Writers and Tour operators' Representatives either based in or visiting India (vii) Rapidly implementing the ITC—Sheraton Agreement and converting it into a committed Marketing Programme with particular emphasis on: (a) New business and demand creation (b) Enlarging the FIT (Free Individual Traveller) arrivals (c) Wider global marketing coverage with effective promotion to exploit emerging favourable newer trends (d) Improving Foreign Exchange net realisations (e) Product-line selling for India with Sheraton properties around the world (f) Creating new interest twin packages of tours connecting India and other parts of the world such as the Nile cruise of Egypt (g) Implementing an aggressive promotion, advertising, public relations programme in their 400 Hotels around the world as well as in mass media (viii) Rapidly connecting up with Sheraton Reservation III Service along with improvements in ITC's own Reservation System to provide better Service, etc.

4. ITC—Sheraton Agreement—Promoting Destination India:

I would now like to explain the ITC-Sheraton Agreement so that Shareholders are aware of the true facts and do not get misled by any irresponsible reporting or vested-interest propaganda. It is unfortunate that it took so long to be sanctioned, as the time could have been used to increase Foreign Travel to India and earn substantial Foreign Exchange. **FIRSTLY**: The arrangement **is entirely within GOI Policy or the Hotel Industry**, being only one of ten other Agreements that have been approved. **SECONDLY**: The Agreement **is not in the nature of a Foreign Collaboration**, there being NO (i) Foreign Investment (2) Foreign Management or Control (3) Technical Collaboration (4) Royalty involved in any manner or degree. It is strictly an International Marketing and Reservations Service arrangement for which a fee is payable, which is no different to overseas selling arrangements with an agent. **THIRDLY**: It is unique active Marketing arrangement, unknown so far, with Sheraton actively involved in Selling, Advertising, Promotion and Public Relations overseas. **FOURTHLY**: It is extremely economic on a knocked-down fee which is less in total costs than charged by Indian Hotel Chains to Independents in India basically for much less and without a Global Reservation Service. **FIFTHLY**: Sheraton will provide the most advanced Global Reservation System set up at a cost of $ 3 million with an annual running cost of around $ 8 million working round the clock. It handles 12 million calls and generates $ 250 million in room revenues alone per year. Along with this ITC Hotels get a Marketing Service from its 400 Hotels around the world, the 100 Sales Offices in over 40 countries with 1,000 sales staff and 64,000 other ambassadors promoting India represented by Sheraton employees. **SIXTHLY**: On an assumed-only ITC owned Hotels turnover of Rs. 10 crores, the rupee cost will be gross Rs. 30 lakhs net Rs. 12 lakhs. Of this a gross Rs. 10 lakhs has been already saved as the ITC Brussels representation is no longer necessary. **SEVENTHLY**: On this figure of Rs. 10 crores the net outflow in foreign exchange will be around Rs. 24 lakhs of which Rs. 10 lakhs ex Brussels has been saved reducing the net outflow to around Rs. 14 lakhs in a year against which the ITC owned Hotels direct foreign exchange earnings will be around Rs. 8 CRORES. On this alone another Rs. 24 CRORES foreign exchange will be generated indirectly.

5. Competitive Marketing—Managing Uncertainties:

In conclusion on this aspect, I submit, that COMPETITIVE MARKETING by ITC and ex-India, coordinated with Sheraton activity Internationally is the **only** way to try and manage the uncertainties of inflation, the energy trauma, the unfavourable air fares to India coupled with absence of economy Charters, seasonability, procedural inconveniences, the acts of God and epidemics irresponsibly reported abroad, ignorance about India and such other impediments as the inhibitions caused by and the misunderstanding of prohibition. The Sheraton linkage aids credibility, pressures, and its vast organisation provides confidence to the Foreign Traveller and Travel Trade that is convincing.

Conclusion:

In my final remarks I reaffirm my faith in our country with its resilience and in our people. The recent political trauma we have all faced is proof of the inbuilt democracy we have and that will endure. With all humility I would submit, that the assured political and economic independence we have achieved is meaningless without the stability that economic development provides. I believe that such stability and economic development will be achieved rapidly and effectively with pragmatic balance between central planning and a market economy; for the latter is the surest road to managing inflation and showing real care and concern for the Public. In this hope, I believe, your Company has a good secure future.

This does not purport to be a report of the proceedings of the 68th Annual General Meeting.

NATIONAL ENGINEERING INDUSTRIES LIMITED
JAIPUR

MANUFACTURERS OF

BALL & ROLLER BEARINGS
TAPERED ROLLER BEARINGS
STEEL AND ALLOY STEEL CASTINGS
STEEL BALLS
AND
AXLE BOXES FOR RAILWAY ROLLING STOCK

COMPANY AFFAIRS

Karnataka Explosives

KARNATAKA EXPLOSIVES, promoted, by Chowgule and Co. Private Ltd. Jointly with the Industrial Credit and Development Syndicate Ltd and Karnataka Industrial Investment and Development Corporation Ltd is entering the capital market on October 5, with a public issue of 4.90 lakh equity shares of Rs. 10 each at par. The proceeds will be utilised for financing partly the company's Rs 295 crore project being set up at Varanga village in south Kanara district of Karnataka for manufacturing industrial explosives.

The company holds an industrial licence for manufacturing 20,000 tonnes per annum of industrial explosives. The technical collaborators are E.I. Du Pont de Numerrous and Co., Inc., USA. The company will manufacture for the first time in India the Tovex water gel explosives developed by Du Pont. Short shelf life, loss of sensitivity and handling difficulties which are common in most of the slurry explosives are eliminated in water gel explosives. Thus the offer a significant technological advantage as compared to the conventional nitro-glycerine based explosives.

The plant is expected to go on stream by November, 1979. Initially the company will set up the first modular plant with a capacity of 10,000 tonnes of explosives per annum. Production in the first year is estimated at 4,000 tonnes valued at around Rs 4 crores. Production in the second year is expected to rise to 6,000 tonnes and to 10,000 tonnes in the third year. In the fifth year, the rated capacity of 20,000 tonnes is expected to be achieved. The company hopes to achieve the break-even point in the second year.

The demand for industrial explosives during 1978-79 was estimated at 91,000 tonnes while the total production in 1978 was barely 50,000 tonnes. Thus there is a wide gap between demand and supply of explosives which could be met only by large-scale imports. Last year, about 6,000 tonnes of explosives were imported. In view of the wide gap between the demand and supply and the technical superiority of the water gel explosives, the company does not anticipate any difficulty in selling its explosives at remunerative prices.

Bombay Tyres International

The recent public issue by Bombay Tyres International Limited (formerly Firestone Tyre and Rubber Co. of India P. Ltd.) of 10,00,000 equity shares of Rs 10 each was over-subscribed. The basis of allotment of shares has been finalised in consultation with the Bombay Stock Exchange. The directors of the company have given additional weightage to the smaller investors by alloting 90.81 per cent of shares available to applicants for 500 shares or under. The company will have over 22,000 shareholders, of which 21,695 have been allotted 75 shares or less. Thus there will be 224 shareholders for every Rs 1 lakh of capital against 200 recommended by the government.

Escorts

Escorts is planning to set up a new project in technical and financial collaboration with Mercury Marine Ltd, Wisconsin, USA, for the manufacture of outboard motors for mechanisation of small fishing boats. The company has applied for an industrial licence to manufacture 10,000 gasolene-operated 10 to 40 HP outboard engines suitable for Indian country fishing boats. The company expects to take up the manufacture of 20 to 40 HP two-cylinder gasolene-operated outboard engines within six months of the receipt of the letter of intent. The project is estimated to cost Rs 6.50 crores which is proposed to be financed by equity capital (Rs 150 lakhs), long term loans (Rs 250 lakhs) and short term loans and self generated funds (Rs 250 lakhs)

Of the equity capital, Escorts proposes to take up Rs 90 lakhs (60 per cent), Escorts will be responsible for marketing, training and after-sales service. The mechanisation of small fishing boats will enable fisherman to increase their catch manifold.

ACC-Vickers- Babcock

ACC-Vickers-Babcock has shown satisfactory results during the year ended March 1979. Sales during the year have been higher at Rs 38.67 crores against Rs. 32.41 crores in the previous year—an increase of over 19 per cent. The company has earned a gross profit of Rs. 692.13 lakhs (Rs. 547.26 lakhs), a rise of over 26 per cent. Dividend has been raised from Rs. 15 to Rs. 18 a share. Allocations include: depreciation Rs. 121.48 lakhs (Rs. 100.53 lakhs), investment, allowance reserve Rs. 21.24 lakhs (Rs. 8.97 lakhs) and taxation Rs. 200 lakhs (Rs. 242 lakhs). A sum of Rs. 196.49 lakhs (Rs. 109.73 lakhs) has been provided for general reserve. Dividend will absorb Rs 169.20 lakhs (Rs 141 lakhs).

Raw Material Shortage

The company despatched a total of 20,457 tonnes of finished goods from all sources as compared to 16,134 tonnes in the previous year. The company felt shortage of raw materials throughout the year. Unprecedented floods in West Bengal followed by disruption of power and coke oven gas supply resulted in the closure of Durgapur works for about a month.

The company proposes to diversify into the manufacture of large size cement plants of the capacity of 3,000 tonnes a day and above together with matching large size mills and other ancillary plants. The company has also arranged collaboration agreement with US firm for the manufacture of various types of crushers and associated equipment like wobblers and apron conveyors.

In the current year so far the company has received orders for two 210 MW boilers for Madhya Pradesh Electricity Board for its Korba west thermal power station and also an order for supply and erection of one 210 MW boiler for DVC. The current order book stands at Rs. 189.13 crores and prospects for securing further orders are good.

Garware Nylons

Mr B.D. Garware, chairman of Garware Nylons, told the annual meeting that sales in the first five months of the current year (April-August) have been satisfactory despite the fact that the production has suffered considerably due to acute power shortage during the past three months or so. Sales during the period are placed at Rs 14 crores and production at 1,162 tonnes.

The companny has installed three diesel generating sets with a total capacity of 3000 KW. It has also been sanctioned additional power of 1000 KW recently for its expansion programme. This is expected to take care of any power cut that may be announced. The chairman has said that the company has covered its raw material supplies up to March, 1980. He also does not expect any adverse impact of the recent credit squeeze on the company's operations, since suitable arrangements for finance have already been made.

Mr Garware said that the industry has been facing a number of problems, some outstanding for long others of relatively recent origin. However, the response from the government, which alone can solve these problems, has not been as prompt and positive as the gravity of the situation demands. Following the rise in the prices of petroleum products all over the world, the prices of the raw materials required by the synthetic fibres manufacturers have risen sharply. Moreover, there is a critical shortage of the industry's major inputs. While he has suggested reduction of import duty burden in the case of the caprolactum and DMT, he feels that the proposal to reduce the import duty on nylon yarn should not be encouraged by the government, since it would hurt the indigenous industry, which is already passing through a very serious crisis.

Machinery Manufacturers

Mr Keshub Mahindra, chairman, Machinery Manufacturers Corporation has expressed a hope that the company would be able to wind up the current year with an improved performance. He told the company's annual meeting that sales in the first five months (April-August) of the current year were around Rs. 5 crores, almost the same as those of the same period last year. The company is going ahead with its modernisation programme. It has several new projects on hand such as a ring frame unit at Mysore and a micro processing equipment unit (totally for exports) at Calcutta. To finance the said projects, the company would come out with a right issue of about Rs. 75 lakhs early next year. The company has orders on hand worth Rs 28 crores against Rs 17 crores in the corresponding period last year.

Orissa Cement

Orissa Cement has reported a substantial increase in production as well as sales during the first six months of the current year. Refractory production during January-June 1979 is placed at 59,000 tonnes against 46,000 tonnes in the same period last year. Sales are placed at 54,000 tonnes against 45,000 tonnes. Production of cement, however, was marginally lower at 2.30 lakh tonnes against 2.40 lakh tonnes and sales at 2.29 lakh tonnes against 2.31 lakh tonnes.

The turnover during January-June this year is placed at Rs. 18.36 crores showing an impressive increase of 32.4 per cent, over the previous year's corresponding figure. While escalating costs of production are stated to have affected the working of the company, the overall results for the current year are unlikely to be less favourable than in 1978.

Piramal Steel

With increase in sales from Rs 44 lakh to Rs 2.98 crores, Piramal Steel has earned a net profit of Rs. 6.87 lakhs in the year ended April 1979, as against a loss of Rs. 19.01 lakhs in the previous year. The results could have been better but for non-availability of certain raw materials in time and labour unrest for two months at the plant.

The company has been able to produce stainless steel by developing its own technology and has achieved a measure of success in manufacturing product of the requisite standard after encountering many teething problems. As stainless and alloy steels fetch more remunerative prices the emphasis is being gradually shifted to the manufacture of these products in preference to mild steel, within the financial and marketing constraints.

During the first three months of the current financial year, sales turnover has been Rs 60 lakhs of which alloy steels account for Rs. 7.5 lakhs. The company is importing a spectrometer at a cost of Rs. 10

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के पैक में।
हमारे अन्य बागानों की
ताजा चाय खुली भी
मिलती है।
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स्वादिष्ट
सुगन्ध
से भरपूर
निर्माता : जय श्री टी एण्ड इण्डस्ट्रीज़ लिमिटेड, नई दिल्ली-११००५५।
मिलने का पता :
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lakhs. This instrument will help the company step up production. The management has suspended operations of the chemical division, as the company has yet not received carry-on-business licence for manufacture of chemicals.

Chemo-Pharma

The working of Chemo-Pharma Laboratories during the year ended March, 1979 has resulted in a profit of Rs. 9.06 lakhs on sales of Rs. 5.40 crores against the loss of Rs. 3.77 lakhs on sales of Rs. 3.68 crores in the previous year. After bringing in the loss of Rs. 58.10 lakhs, a debit balance of Rs. 49.05 lakhs has been carried forward. Provisions not made include gratuity of Rs 15.58 lakhs, depreciation Rs 30.70 lakhs and the investment allowance Rs. 7.30 lakhs.

During the year, there has been an overall improvement in the production and sales of both the pharmaceutical and fine chemicals divisions as also in the trading business. The production of basic drugs and intermediates was higher at 144 tonnes against 68 tonnes in the preceding year, despite the closure of the plant for nearly four months for want of raw materials. Prospects of the current year are considered fair, although constraints persist with regard to availability of certain basic raw materials.

Capital & Bonus Issues

Five companies have been authorised to issue bonus shares, while another eight companies have been allowed to raise further capital.

Bonus Issue: Chemico Intermediate Pvt. Ltd. Rs. 80,000 in fully paid equity shares of Rs. 100 each in the ratio of one for one; Sushripada Chemicals Pvt. Ltd. Rs 100,000 in fully paid equity shares of Rs. 100 each in the ratio of one for one; Lohia Machines Ltd. Rs 46,00,000 in fully paid equity shares of Rs 10 each in the ratio of four for five; MHP Chemicals Industries Pvt. Ltd. Rs 1,00,000 in fully paid equity shares of Rs. 100 each in the ratio of one for one, Usha Garments Mfg. Co. Pvt. Ltd. Rs. 2,50,000 in fully paid equity shares of Rs. 100 each in the ratio of one for one.

Ferro Alloys Corpn. Ltd, is to issue of debentures worth Rs. 75 lakhs, carrying interest at the rate of 11 per cent per annum, for cash at par on pro-rata basis.

Golden Tobacco Co. Ltd. is to issue rights debentures worth Rs. 75 lakhs carrying interest at the rate of 11 per cent per annum for cash at par on pro-rata basis.

Tata Engineering and Locomotive Co. Ltd. is to issue unsecured covertible bonds of Rs. 47.25 crores for cash at par.

Zenith Steel Pipes and Industries Ltd. is to issue rights of secured debentures worth Rs 125 lakhs, for cash at par.

National Machinery Manufactures Ltd. is to issue capital of Rs 332,40,000 in equity shares of Rs. 100 each for cash at par, on pro-rata basis.

Mysore Power Corpn. Ltd. is to issue 15,000 debentures of Rs. 10,000 each carrying interest at 6-3/4 per cent per annum to the public by prospectus. Special Steel Ltd. is to issue equity shares worth Rs. 100 lakhs, as rights for cash at par in order to meet a part of the cost of the project to be set up at Tarapur.

Kesoram Industries and Cotton Mills Ltd. is to issue 2,50,000. 11 per cent debentures of Rs. 100/- each for cash at par on pro-rata basis.

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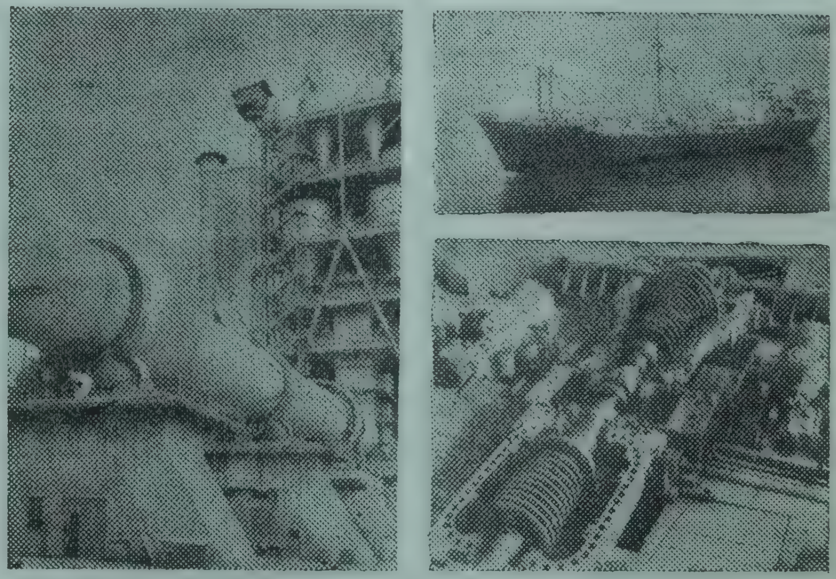
FOREIGN TRADECOMPANY



EXPORTS :

—Plants and complex installations for the production of equipment and installations in the field of mechanical engineering, electrical engineering and electronics; licences and manufacturing technologies, the relevant CKD.

—Thermoelectric power plants, thermal power stations, district heating plants, hydroelectric power plants, hydromechanical equipment, the relevant individual equipment and outfits, spare parts.

—Metallurgical and iron and steel installations.

—Food industry installations.

—Cement lines, various individual equipment and outfits, spare parts.

—Studies, designs, know-how, engineering, production lines technologies for the above mentioned erection, technical assistance, training and other services related to the above lines, factories and plants.

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Telephone : 50.25.35 Cables : uzexim—bucharest

RECORDS AND STATISTICS

Current statistics

(Index numbers of wholesale prices for the week ended August 25, 1979)

THE OFFICIAL wholesale prices index (base 1970-71 = 100) for "all commodities" stood at 218.9 (provisional) during the week ended August 25, 1979, as against 216.2 (provisional) for the previous week. At this level the index was higher by 1.2 and 17.3 per cent, respectively, when compared to the previous week and that of a year ago.

The group-wise analysis of price movements is shown below :

I. **Primary Articles** : The index for "food articles" declined by 0.4 per cent to 192.9 from 193.6 for the earlier week due to lower prices of tea (—7%), tomatoes (—6%), onions (—3%), arhar and bananas (—2% each), and maize, eggs and meet, (—1% each). However, the prices of butter and fish (+6% each), moong (+3%), bajra and urad (+2% each) and barley and masoor (+1% each) moved up.

The index for "non-food articles" advanced by 0.5 per cent to 197.2 from 196.2 for the previous week owing to an increase in prices of mahua seed (+7%), copra (+4%), linseed and logs and timber (+3% each), raw wool, rape and mustard seeds, gingelly seed, and niger seed and castor seed (+2% each) and raw silk (+1%). The prices of kardi seed and soyabean (—3% each) and mesta and groundnuts (—1% each), however, declined.

The index for "minerals" stood stationary at its last week's level of 708.4.

II. **Fuel, Power, Light & Lubricants** : The index for this major group rose by 9.9 per cent to 294.9 from 268.3 for the previous week on account of higher prices of light diesel oil and furnace oil (+36% each), aviation spirit (+24%) kerosene oil and high speed diesel oil (+14% each) and petrol (+10%).

III. **Manufactured Products** : Among "manufactured products," the index for "food products" moved up by 0.5 per cent to 224.1 from 223.0 for the earlier week due to a rise in the prices of atta (+11%), gingelly oil salt and suji (+3% each), bran, khandsari coconut oil, mahua oil and rise bran oil (+2% each) gur and mustard oil (+1% each). However, the prices of solvent extracted groundnut oil (—4%) cotton seed oil (—3%), oil cakes (—2%) and groundnut oil and kardi oil (—1% each) declined.

The index for 'beverages, tobacco and tobacco products" remained unchanged at its previous week's level of 184.6.

Higher prices of jute manufacturers (+11%) raised the index for 'textiles" group by 1.1 per cent to 200.8 from 198.6 for the preceding week. However, the prices of handloom and powerloom cloth (—1%) declined.

The index for "paper and paper products" stood stationary at its earlier week's level of 227.0.

The index for "leather and leather products" recorded no change from the preceding week and remained at 315.6.

The index for "rubber and rubber products" continued firm at its previous week's level of 205.2.

The index for "chemicals and chemical products" advanced by 0.3 per cent to 186.7 from 186.2 for the previous week owing to higher prices of sulphuric acid (+17%), calcium carbide (+17%), cellulosic and moisture proof film (+4%), castor oil (+3%) and linseed oil (+2%).

The index for "non-metallic minerals products" remained unchanged at the previous week's level of 244.2.

The index for "basic metals, alloys and metal products" stood stationary at its earlier week's level of 246.9.

An increase in prices of switch board panels (+26%), oil circuit breakers (+19%), trucks (+7%) and rims (+1%) pushed up the index for "machinery and transport equipment" by 1.0 per cent to 210.4 from 208.3 for the earlier week.

The index for "miscellaneous products" stood at 204.6, as against 204.4 for the last week.

Index Numbers of Wholesale Prices by Major Groups, Groups & Sub-Groups (Base : 1970-71 = 100)

Major groups, groups & sub-groups	Weight in relation to all-commodities	Week ending				
		25-8-79	19-8-79	28-7-79	30-6-79	26-8-78
		(Provisional)			(Final)	
1	2	3	4	5	6	7
ALL COMMODITIES	1000.00	**218.9**	**216.2**	**212.1**	**203.6**	**186.6**
I. Primary Articles	416.67	**209.4**	**209.6**	**206.5**	**195.6**	**183.4**
A. **Food Articles**	297.99	**192.9**	**193.6**	**191.0**	**185.2**	**176.4**
Foodgrains (i+ii)	129.22	185.2	185.0	181.8	173.8	174.0
(i) Cereals	107.43	171.9	171.8	169.0	161.6	157.7
(ii) Pulses	21.79	250.8	250.5	244.9	234.1	254.4
(iii) Fruits and vegetables	61.33	220.0	233.1	216.2	203.8	174.8

Contd.

Index Numbers of Wholesale Prices by Major Groups, Groups & Sub-Groups—*Contd.*

1	2	3	4	5	6	7
(iv) Milk and milk products	61.50	172.0	171.0	171.4	176.1	170.1
(v) Eggs, fish and meat	18.97	241.9	237.2	235.6	241.0	212.9
(vi) Condiments and spices	10.94	154.1	153.8	149.5	138.7	178.6
(vii) Other food articles	16.04	199.5	211.1	219.6	206.2	180.2
B. Non-Food Articles	**106.21**	**197.2**	**196.2**	**191.0**	**181.2**	**167.7**
(i) Fibres	31.73	170.3	169.7	167.3	165.7	167.8
(ii) Oilseeds	42.01	200.9	199.7	190.0	168.9	163.8
(iii) Other non-food articles	32.47	218.7	217.7	215.3	212.2	172.7
C. Minerals	**12.47**	**708.4**	**708.4**	**707.9**	**566.5**	**485.7**
(i) Metallic minerals	2.29	207.9	207.9	206.0	207.9	202.4
(ii) Other minerals	4.16	203.2	203.2	202.6	203.2	196.6
(iii) Petroleum crude and natural gas	6.02	1249.0	1249.0	1249.0	954.7	793.9
II. Fuel, Power, Light & Lubricants	**84.59**	**294.9**	**268.3**	**268.3**	**252.7**	**245.4**
(i) Coal mining	11.47	327.4	327.4	327.4	212.1	211.3
(ii) Mineral oils	49.12	325.0	279.3	279.3	279.3	271.2
(iii) Electricity	24.00	217.8	217.8	217.8	217.8	209.0
III. Manufactured Products	**498.74**	**214.0**	**212.9**	**207.2**	**202.0**	**179.4**
A. Food Products	**133.22**	**224.1**	**223.0**	**207.9**	**188.7**	**162.4**
(i) Dairy products (incl. processed milk and tinned milk)	3.88	214.7	214.7	214.7	212.6	206.5
(ii) Canned & preserved fruits & vegetables	0.39	175.0	175.0	175.0	175.0	166.6
(iii) Canned & preserved fish & sea food	0.36	349.4	262.1	262.1	349.4	206.0
(iv) Grain mill products	4.64	179.3	167.3	167.3	162.8	161.8
(v) Bakery products	1.85	156.8	156.8	156.8	156.8	157.4
(vi) Sugar, khandsari and gur	72.41	242.2	240.8	220.6	196.5	156.2
(vii) Sugar, confectionery, cocoa and chocolate	0.53	164.4	164.4	164.4	164.4	159.8
(viii) Miscellaneous food products (a+b+c)	49.16	205.0	205.8	194.8	178.2	168.0
(a) Edible oils	37.16	206.0	206.3	192.9	175.6	160.1
(b) Oilcakes	9.05	204.0	207.2	202.8	184.1	191.7
(c) Other miscellaneous food products	2.95	195.2	194.5	193.5	193.5	193.7
B. Beverages, Tobacco & Tobacco Products	**27.08**	**184.6**	**184.6**	**184.6**	**184.6**	**177.8**
(i) Wine industry	6.77	142.0	142.0	141.7	141.7	139.3
(ii) Soft drinks	0.82	196.6	196.6	196.6	196.6	224.9
(iii) Tobacco manufactured	19.49	199.0	199.0	199.0	199.0	189.3
C. Textiles	**110.26**	**200.8**	**198.6**	**194.7**	**194.1**	**175.7**
(i) Cotton textiles	81.02	193.5	194.2	193.4	191.1	179.5
(ii) Woollen yarn and textiles	2.44	224.8	224.8	224.8	224.8	216.7
(iii) Silk, art silk and synthetic fibre textiles	12.83	192.3	192.3	179.6	183.4	165.5
(iv) Jute, hemp and mesta textiles	12.14	240.6	216.0	201.6	204.1	146.0
(v) Textile products n.e.c.	1.83	287.8	287.8	273.2	293.8	222.4

—Contd.

Index Numbers of Wholesale Prices by Major Groups, Groups & Sub-Groups—*Contd.*

1	2	3	4	5	6	7
D. **Paper & Paper Products**	**8.51**	**227.0**	**227.0**	**217.0**	**223.5**	**190.6**
E. **Leather & Leather Products**	**3.85**	**315.6**	**315.6**	**314.4**	**315.0**	**256.2**
(i) Tanned and cured finished leather	2.95	351.4	351.4	349.8	350.5	274.4
(ii) Footwear and other leather products	0.90	197.7	197.7	197.7	197.7	196.5
F. **Rubber & Rubber Products**	**12.07**	**205.2**	**205.2**	**199.5**	**202.5**	**178.2**
(i) Tyres & tubes	9.84	206.3	206.3	199.4	203.0	177.3
(ii) Other rubber products	2.23	200.7	200.9	200.0	200.7	182.1
G. **Chemicals & Chemical Products**	**55.48**	**186.7**	**186.2**	**185.2**	**184.3**	**176.0**
(i) Basic industrial chemicals	7.26	247.3	244.8	240.8	241.6	206.4
(ii) Fertilizers	12.52	166.6	166.6	166.6	165.0	175.9
(iii) Insecticides	1.16	252.8	252.8	252.8	252.8	231.1
(iv) Paints and varnishes	1.92	218.5	218.5	218.5	218.5	204.1
(v) Drugs and medicines	9.83	135.0	135.0	135.3	135.0	136.2
(vi) Cosmetics, soap and detergents	5.86	195.3	195.3	194.2	194.4	183.4
(vii) Inedible oils	1.54	193.2	188.6	189.6	158.2	148.3
(viii) Synthetic resin/rosin and plastic materials	8.30	178.9	178.3	175.8	177.4	168.4
(ix) Dyestuffs & other chemicals n.e.c.	7.09	213.2	213.3	212.7	213.3	192.2
H. **Non-Metallic Mineral Products**	**14.15**	**241.2**	**241.2**	**240.6**	**239.4**	**209.9**
(i) Structural clay products	1.82	245.7	245.7	245.7	245.7	210.8
(ii) Glass and glass products	1.98	245.7	275.4	273.3	272.9	261.2
(iii) Earthenware and ear then pottery	0.96	283.7	283.7	283.7	283.7	252.8
(iv) Çement, lime and plaster	7.07	228.8	228.8	228.8	226.3	190.0
(v) Miscellaneous non-metallic mineral products	2.32	228.6	228.6	227.2	227.7	208.7
I. **Basic Metals, Alloys & Metal Products**	**59.74**	**246.9**	**246.9**	**246.3**	**245.3**	**211.8**
Basic metals & alloys (i+ii)	46.51	251.6	251.6	250.3	250.5	215.4
(i) Iron, steel and ferro alloys	34.73	254.9	254.9	254.9	254.9	215.0
(ii) Non-ferrous metals and their alloys	11.78	241.8	241.8	236.6	237.4	216.6
(iii) Metal products	13.23	230.5	230.5	232.2	227.3	199.0
J. **Machinery & Transport Equipment**	**67.18**	**210.4**	**208.3**	**205.9**	**207.2**	**181.7**
Machinery & machine tools (i+ii)	50.45	206.9	205.8	205.1	205.8	180.6
(i) Non-electrical machinery	30.91	212.6	212.6	214.5	211.6	187.5
(ii) Electrical machinery	19.54	197.9	195.2	193.4	196.7	169.6
Transport equipment (iii+iv)	16.73	221.2	215.6	208.3	211.3	185.0
(iii) Motor vehicles and parts	13.73	230.2	223.4	215.3	218.4	191.3
(iv) Motorcycles/scooters, bicycles and parts	3.00	180.0	179.9	176.2	178.5	156.2
K. **Miscellaneous Products**	**7.20**	**204.6**	**204.4**	**204.8**	**204.3**	**181.6**
(i) Wood and wood products	1.74	209.2	208.5	208.2	209.2	191.5
(ii) Other manufacturing industries n.e.c.	5.46	203.1	203.1	203.6	202.7	178.5

Source : Office of the Economic Adviser, Ministry of Industry, Government of India

Consumer Price Index Numbers for Industrial Workers

(Base : 1960 = 100)

Centre	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979				A year ago
										April	May	June	July	
All-India	**186**	**192**	**207**	**250**	**317**	**313**	**301**	**324**	**331**	**337**	**339**	**345**	**353**	**330**
Ahmedabad	176	181	198	245	305	293	281	310	323	328	331	335	341	320
Alwaye	198	202	215	267	346	358	321	319	335	344	352	357	362	333
Asansol	189	194	206	245	316	317	318	338	342	348	354	357	361	337
Bangalore	186	194	212	265	318	332	321	342	339	350	354	359	367	336
Bhavnagar	186	194	217	273	327	315	297	325	340	344	345	352	363	341
Bombay	182	190	203	233	289	300	298	318	325	331	335	344	351	325
Calcutta	182	187	197	228	288	287	297	320	331	331	335	346	349	329
Coimbatore	163	177	189	218	309	319	304	319	326	332	343	347	353	321
Delhi	199	211	222	265	337	333	332	358	368	375	374	378	388	369
Digboi	189	188	198	234	310	317	310	336	339	342	350	360	365	337
Gwalior	191	197	214	271	348	324	318	343	350	352	352	354	366	356
Howrah	186	191	206	239	298	290	292	313	319	325	329	332	331	313
Hyderabad	189	195	211	251	304	316	308	337	341	340	338	345	361	342
Jamshedpur	183	187	202	249	313	293	288	316	322	329	331	336	341	324
Madras	170	182	203	229	301	314	288	311	318	327	327	334	346	314
Madurai	183	192	206	236	334	333	302	331	338	346	349	350	356	330
Monghyr	205	204	225	292	363	325	317	345	348	352	349	363	381	344
Mundakayam	197	199	210	263	337	346	304	302	313	318	323	325	341	308
Nagpur	187	192	203	256	314	326	297	315	325	332	333	339	346	323
Saharanpur	186	196	213	253	338	313	304	335	345	348	342	343	352	347
Sholapur	185	198	216	277	325	342	308	326	343	347	349	356	368	337

Source : Labour Bureau, Government of India, Chandigarh.

Consumer Price Index Numbers for Urban Non-manual Employees

(Base : 1960 = 100)

Centre	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979				A year ago
										April	May	June	July	
All-India	**174**	**180**	**192**	**221**	**270**	**277**	**277**	**296**	**306**	**311**	**314**	**318**	**325**	**306**
Bombay	168	172	183	204	241	246	255	269	285	298	303	306	314	286
Delhi-New Delhi	174	180	190	217	262	273	274	288	303	311	313	314	323	304
Calcutta	170	174	180	204	238	243	251	265	279	282	286	292	294	277
Madras	175	188	204	231	291	306	294	311	321	329	332	334	343	318
Hyderabad-Secunderabad	174	180	195	223	270	283	282	305	318	322	325	331	343	315
Bangalore	172	180	194	228	272	284	286	306	309	316	321	325	329	308
Lucknow	166	174	185	215	265	270	274	297	305	309	310	313	320	306
Ahmedabad	171	173	188	222	271	272	263	291	298	300	302	307	314	302
Jaipur	183	188	205	244	308	311	312	334	338	344	341	343	353	343
Patna	191	190	199	229	286	284	282	299	308	316	313	316	322	304
Srinagar	184	191	200	215	262	280	300	319	344	353	357	356	357	339
Trivandrum	178	184	198	231	280	297	301	309	319	329	331	332	339	316
Cuttack-Bhubaneswar	176	184	196	221	266	270	272	290	301	304	307	315	326	301
Bhopal	180	188	204	238	295	296	295	318	319	320	321	324	333	321
Chandigarh	178	183	194	217	265	278	284	299	308	314	317	319	328	309
Shillong	166	175	183	208	257	274	268	284	296	311	311	311	317	300

Source: Central Statistical Organisation, New Delhi.

Index Numbers of Security Prices—All-India
(Week ended Saturday)

(Base: 1970-71 = 100)

Item	Weight	1979									A year ago
		JUNE	JULY				AUGUST				
		30	7	14	21	28	4	11	18	25	
Government and Semi-government Securities											
(Total: a+b+c)	**100.0**	**97.7**	**97.6**	**97.6**	**97.6**	**97.5**	**97.5**	**97.5**	**97.5**	**97.5**	**97.6**
a. Government of India	74.7	96.8	96.8	96.8	96.6	96.6	96.6	96.6	96.6	96.6	96.7
b. State Governments	19.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99 8	99.8	99.7
c. Semi-Government Institutions	5.6	101.9	101.9	101.9	101.9	101.9	101.8	101.8	101.8	101.8	102.1
Debentures of Joint Stock Companies											
All Industries	**100.0**	**90.1**	**90.1**	**90.1**	**90.1**	**90.1**	**90.1**	**90.1**	**90.1**	**90.1**	**89.2**
Preference Shares											
All Industries	**100.0**	**82.0**	**81.8**	**81.1**	**80.9**	**80.9**	**80.9**	**81.1**	**81.0**	**81.0**	**80.8**
Ordinary Shares											
All Industries	**100.0**	**145.5**	**144.7**	**142.4**	**142.5**	**142.5**	**139.7**	**140.0**	**139.4**	**139.4**	**126.8**
Of which:											
Tea Plantations	2.2	239.9	235.8	237.9	239.7	241.4	239.9	239.3	238.3	239.1	247.2
Cotton Textiles	9.7	139.2	138.5	135.7	135.9	135.7	133.9	132.9	132.8	132.6	116.5
Jute Textiles	0.9	113.2	115.1	117.8	119.1	124.0	135.5	145.2	147.0	147.7	71.7
Silk, Woollen and Rayon Textiles	6.2	186.8	185.5	181.5	181.0	181.7	178.7	177.8	176.8	177.1	156.9
Aluminium	3 8	73.2	71.2	70.3	70.1	70.1	69.1	69.0	68.6	69.1	58.5
Transport Equipment	5.4	133.5	132.1	130.2	131.1	130.2	127.2	129.8	129.3	129.3	104.3
Electrical Machinery, Apparatus, Appliances etc.	6.5	147.6	147.2	146.4	144.0	142.3	140.0	137.8	136.8	136.5	120.1
Chemical Fertilisers	3.6	206.6	205.2	201.1	201.5	200.6	194.8	196.2	195.3	195.1	202.5
Cement	3.6	159.0	158.2	157.3	156.0	154.2	149.5	150.3	148.8	147.5	143.6
Paper and Paper Products	3.3	178.3	176.3	173.5	172.4	172.0	171.6	171.1	169.3	169.6	152.2
Rubber and Rubber Poducts	3.4	71.8	69.8	68.6	68.2	65.2	63.1	61.9	61.9	62.1	53.6
Electricity Generation and Supply	2.2	78.1	78.3	79.3	80.2	80.3	80.0	79.1	79.2	79.6	82.9
Shipping	2.0	129.5	133.2	134.1	138.1	140.7	136.2	136.2	133.8	133.3	84.7

Source: Reserve Bank of India.

Bullion Prices (Spot)—Bombay
(As on Friday unless otherwise indicated)

(In rupees)

	1979												A year ago*
	JUNE	JULY				AUGUST					SEPTEMBER		
	29	6*	13	20	27	3	10	17	24	31	7	14	
Standard Gold (per 10 grams)													
Opening	966	985	996	993	1,004	1,009	1,018	1,065	1,180	1,120	1,140	1,145	767
Closing	964	987	996	998	1,006	1,009	1,018	1,080	1,140	1,110	1,135	1,140	766
Silver (per kilogram)													
Opening	1,567	1,625	1,682	1,724	1,709	1,696	1,754	1,717	1,770	1,803	1,849	1,925	1,405
Closing	1,580	1,626	1,700	1,700	1,706	1,710	1,762	1,738	1,770	1,798	1,843	1,934	1,401

*Prices relate to Thursday, Friday being a holiday.

Source: Bombay Bullion Association Ltd.

Statement of Affairs of the Reserve Bank of India

(Issue and Banking Departments combined)

(As on last Friday)

(Rs crores)

Item	1970-71	1974-75	1975-76	1976-77	1977-78	1978-79	1979 April	1979 May	1979 June	1979 July	1979 August	A year ago
1. **Notes in Circulation** (a—b)	**4,212**	**6,190**	**6,535**	**7,743**	**8,602**	**10,267**	**10,744**	**11,074**	**11,242**	**11,228**	**11,250**	**9,000**
(a) Total Notes Issued	4,221	6,232	6,573	7,779	8,616	10,318	10,793	11,115	11,267	11,267	11,267	9,051
Less												
(b) Notes held in Banking Department	10	42	38	36	14	51	48	41	25	39	17	51
2. **Deposits** (Total: a to e)	**553**	**1,862**	**2,913**	**3,664**	**6,287**	**4,876**	**6,392**	**6,392**	**6,398**	**6,460**	**6,373**	**4,229**
(a) Central and State Governments	264	541	671	388	2,771	723	2,201	2,083	2,138	2,137	2,137	575
(b) Scheduled Commercial Banks	207	611	607	1,146	1,674	2,634	2,819	2,879	2,855	2,910	2,787	2,063
(c) Scheduled State Co-operative Banks	9	18	21	28	41	46	48	47	49	40	40	27
(d) Other Banks	1	2	3	3	4	6	6	7	8	8	8	4
(e) Others	72	689	1,612	2,099	1,797	1,466	1,318	1,376	1,348	1,365	1,401	1,560
3. **Other Liabilities**	**689**	**1,614**	**2,137**	**2,213**	**2,927**	**3,222**	**3,232**	**3,286**	**3,365**	**3,551**	**3,391**	**2,665**
4. **Total Liabilities/Assets**	**5,454**	**9,666**	**11,585**	**13,620**	**17,816**	**18,365**	**20,368**	**20,752**	**21,005**	**21,239**	**21,014**	**15,854**
5. **Foreign Exchange Assets** (Total : a+b)	**350**	**633**	**1,518**	**2,767**	**3,889**	**4,655**	**4,813**	**4,884**	**4,754**	**4,759**	**4,759**	**3,880**
a. Foreign Securities	273	122	272	1,072	1,766	2,694	2,769	2,769	2,769	2,769	2,769	2,245
b. Balances held Abroad[1]	77	511	1,246	1,696	2,123	1,961	2,043	2,078	1,985	1,990	1,990	1,635
6. Gold Coin and Bullion	183	183	183	188	193	219	219	219	219	219	219	214
7. Government of India Rupee Securities	3,714	5,915	6,105	6,500	6,645	7,366	7,766	8,091	8,420[2]	8,653[2]	8,653[2]	6,746[2]
8. **Loans and Advances** (Total : a to d)	**958**	**1,533**	**2,052**	**2,430**	**2,107**	**2,352**	**2,081**	**2,147**	**2,276**	**2,337**	**2,113**	**1,845**
(a) State Governments[3]	250	260	304	327	402	170	208	165	165	165	165	226
(b) Scheduled Commercial Banks	368	473	798	967	331	546	387	506	659	748	591	225
(c) State Co-operative Banks	306	441	459	488	595	558	410	396	372	343	341	475
(d) Others	34	359	491	648	779	1,078	1,076	1,080	1,080	1,081	1,116	909
9. **Bills Purchased and Discounted** (Total : a+b)	**38**	**838**	**739**	**531**	**2,809**	**1,675**	**2,886**	**3,234**	**3,372**	**3,306**	**3,032**	**1,162**
(a) Internal/Commercial	7	183	176	184	117	106	88	71	77	73	77	46
(b) Government Treasury Bills	31	655	563	347	2,692'	1,569	2,798	3,163	3,295	3,233	2,955	1,116
10. Investments	113	382	444	215	1,077	852	952	886	701[4]	712[4]	712[1]	727[4]
11. Other Assets[5]	98	180	544	988	1,096	1,246	1,652	1,327	1,262	1,253	1,426	1,280

1. Includes Cash, Short-term Securities and Fixed Deposits.
2. Including *ad-hoc* Treasury Bills.
3. Including temporary overdrafts.
4. Include investments in Foreign Shares/Bonds but exclude those in Rupee Securities.
5. Including rupee coins/Government of India one rupee notes.

Note : Individual figures may not, in all cases, add up exactly to total due to rounding off.

All Scheduled Commercial Banks—Business in India

(As on last Friday)

(Amounts in Rs crores)

Item	1970-71	1974-75	1975-76	1976-77	1977-78	1978-79	1979					A year ago
							April	May	June	July	August	
1. Aggregate Deposits												
(Total : a+b)	**5,906**	**11,827**	**14,155**	**17,566**	**22,211**	**27,001**	**27,100**	**27,394**	**27,869**	**28,480**	**29,204**	**23,755**
(a) Demand Deposits	2,626	4,963	5,817	6,943	8,867	10.438	10,263	10,345	10,381	10,681	10,867	8,777
(b) Time Deposits	3,280	6,864	8,338	10,623	13,344	16,564	16,837	17,049	17,488	17,799	18,337	14,978
2. Borrowings from Reserve Bank†	**368**	**473**	**798**	**967**	**331**	**546**	**387**	**506**	**659**	**748**	**591**	**225**
3. Cash in Hand and Balances with Reserve Bank												
(Total : a+b)	**364**	**908**	**912**	**1,500**	**2,143**	**3,189**	**3,381**	**3,452**	**3,457**	**3,500**	**3,360**	**2,519**
(a) Cash in Hand	167	296	305	354	469	555	562	573	602	590	574	456
(b) Balances with Reserve Bank††	197	611	607	1,146	1,674	2,634	2,819	2,879	2,855	2,910	2,787	2,063
4. Investments												
(Total : a+b)			**4,607**	**5,536**	**7,897**	**9,109**	**9,675**	**9,343**	**9,418**	**9,599**	**9,987**	**3,566**
(a) Government Securities*	1,362	2,826	3,283	3,930	5,907	6,621	7,167	6,844	6,908	7,039	7,266	6,383
(b) Other Approved Securities			1,324	1,606	1,990	2,488	2,508	2,499	2,510	2,560	2,721	2,182
5. Bank Credit												
(Total : a+b+c)	**4,684**	**8,762**	**10,877**	**13,173**	**14,939**	**17,777**	**17,845**	**18,124**	**18,538**	**1,268**	**19,542**	**13,451**
Of which :												
5.1 For Financing Food Procurement Operations@	214	613	1,521	2,190	1,984	2,210	2,224	52,84	2,996	2,987	2,908	2,361
(a) Loans, Cash-Credits and Overdrafts	3,708	7,106	8,527	11,411	12,708	15,296	15,343	15,682	16,210	16,977	17,294	13,477
(b) Inland Bills, Purchased and Discounted**	765	1,271	1,852	1,155	1,576	1,668	1,646	1,617	1,538	1,489	1,458	1,334
(c) Foreign Bills, Purchased and Discounted	211	385	498	607	655	813	856	825	790	802	791	639
6. Cash-Deposit Ratio												
(3) as per cent of (1)	6.2	7.7	6.4	8.5	9.6	11.8	12.5	12.6	12.4	12.3	11.5	10.6
7. Investment-Deposit Ratio												
(4) as per cent of (1)			32.5	31.5	35.6	33.7	35.7	34.1	33.8	33.7	34.2	36.1
(4a) as per cent of (1)	23.1	23.9	23.2	22.4	26.6	24.5	25.6	24.8	24.8	24.7	24.9	26.9
8. Credit-Deposit Ratio												
(5) as per cent of (1)	79.3	74.1	76.8	75.0	67.3	65.8	65.8	66.2	66.5	67.7	66.9	65.0

† As available in the Reserve Bank records.

†† As per the Statement of Affairs of the Reserve Bank of India with effect from July 6, 1973.

* At Book Value; including Treasury Bills and Treasury Deposit Receipts, etc.

** Excludes Bills Re-discounted with Reserve Bank of India.

@ Figures relate to Advances of Indian Scheduled Commercial Banks. With effect from week ending June 17, 1977 such advances by Foreign Scheduled Commercial Banks are also included.

Note : Individual figures may not, in all cases, add up exactly to total due to rounding off.

Analysis of Money Stock Measures

(As on last Friday)

(Rs crores)

Sl. No.	Item	1970-71	1974-75	1975-76	1976-77	1977-78	1978-79	1979					A year ago
								April	May	June	July	August	
	MONEY STOCK MEASURES (M_1 and M_3)												
1.	**Money Supply (M_1)** (Total : a+b+c)	7,321	11,911	13,143	15,609	18,383	21,858	22,047	22,512	22,643	22,967	23,229	18,851
	(a) Currency with the Public	4,367	6,348	6,704	7,873	8,631	10,201	10,672	10,991	11,134	11,136	11,174	9,048
	(b) Bank Money (=Demand Deposits with Banks)	2,910	5,485	6.385	7,636	9,683	11,455	11,297	11,374	11,373	11,678	11,866	9,681
	(c) Other Deposits with Reserve Bank*	44	78	54	100	70	202	78	147	136	153	189	122
2.	**M_3 (=M_1+Time Deposits with Banks)** (Total: 1+7a)	10,958	19,462	22,286	27,279	32,905	39,866	40,361	41,047	41,605	42,237	43,028	35,162
	SOURCES OF CHANGE IN M_1												
3.	**Net Bank Credit to Government** (Total : a+b)	5,264	9,533	10,112	11,022	13,470	15,391	16,213	16,585	16,885	17,199	17,150	14,102
	(a) RBI's Net Credit to Government	3,807	6,570	6,697	6,926	7,387	8,568	8,842	9,517	9,748	9,919	9,641	7,522
	(b) Other Banks' Credit to Government	1,457	2,963	3,414	4,096	6,083	6,824	7,371	7,067	7,137	7,280	7,509	6,580
4.	**Bank Credit to Commercial Sector**** (Total : a+b)	6,455	12,647	15,392	18,503	21,222	25,332	25,376	25,630	26,084	26.831	27.274	22,135
	(a) RBI's Credit to Commercial Sector	125	652	721	887	954	1,248	1,228	1,215	1,220	1,216	1,255	1,017
	(b) Other Banks' Credit to Commercial Sector	6,330	11,995	14,671	17,617	20,268	24,084	24,147	24,415	24,864	25,615	26,019	21,118
5.	**Net Foreign Exchange Assets of Banking Sector**	559	392	1,094	2,471	4,462	5,436	5.608	5,664	5,565	5,581	5,581	4,720
6.	**Government's Net Currency Liabilities to the Public**	384	531	555	568	593	591	591	591	595	593	593	597
7.	**Non-monetary Liabilities of Banking Sector** (Total : a+b+c)	5,341	11,192	14,009	16,955	21,363	24,892	25,741	25,958	26,486	27,237	27,369	22,703
	(a) Time Deposits with Banks@	3,637	7,551	9,143	11,671	14,522	18,008	18,314	18,535	18,962	19,270	19,799	16,311
	(b) Net Non-monetary Liabilities of RBI	714	1,670	2,577	2,833	3,452	3,312	2,893	3,258	3,388	3,582	3,249	2,856
	(c) Residual (Derived)	990	1,971	2,289	2,451	3,390	3,572	4,533	4,164	4,136	4,385	4,321	3,536
8.	**M_1 (Money Supply)** (3+4+5+6—7)	7,321	11,911	13,143	15,609	18,383	21,858	22,047	22,512	22,643	22,967	23,229	18,851

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* Excluding Balances held on IMF Account No. 1, Reserve Bank of India Employees' Provident Fund, Pension Fund and Co-operative Guarantee Fund and some extraordinary items. The amounts collected under the Additional Emoluments (Compulsory Deposit) Act, 1974 and the Compulsory Deposit Scheme (Income Tax Payers) Act, 1974 are also excluded since August 16, 1974 and December 13, 1974 respectively.

** Includes Public Sector Enterprises.

@ Relate to Time Deposits of Scheduled and Non-Scheduled Commercial Banks, State Co-operative Banks, Central Co-operative Banks and Primary Co-operative Banks.

Note : Individual figures may not, in all cases, add up exactly to total due to rounding off.

The Course of Indian Industrial Production : 1976-1979

(Months Averages or Calender Month)

(Index Numbers with Base: 1970 = 100)

Code No.	Description	Weight	1976	1977	1978 Jan.-March	1978 April-June	1978 July. Sep.	1978 Oct.-Dec.	1979 Jan. (R)	1979 Feb. (R)	1979 March (P)	1979 April (P)	1979 May (P)	A year ago (R)
	GENERAL INDEX (CRUDE)	**100.00**	**131.4**	**138.3**	**150.2**	**144.6**	**145.8**	**150.4**	**158.6**	**152.2**	**167.4**	**145.9**	**146.8**	**149.0**
1.	**Mining and Quarrying**	**9.69**	**136.8**	**139.9**	**161.7**	**130.7**	**132.0**	**144.0**	**169.0**	**160.0**	**181.0**	**142.0**	**143.0**	**133.0**
2-3.	**Manufacturing**	**81.08**	**127.5**	**135.1**	**145.7**	**141.9**	**143.3**	**146.5**	**152.5**	**148.2**	**161.5**	**140.6**	**141.4**	**146.4**
20.	Food Manufacturing Industries except Beverage Inpustries	7.74	110.5	118.4	162.6	150.0	113.8	127.4	167.7	162.1	178.7	143.8	135.0	159.4
21.	Beverage Industries	0.69	298.9	347.0	330.5	487.1	425.6	308.6	308.4	292.2	293.0	284.9	308.4	540.4
22.	Tobacco Industries	2.21	106.6	107.7	102.3	107.4	119.7	120.8	137.7	122.0	118.2	116.3	114.4	108.5
23.	Manufacture of Textiles	17.43	105.6	103.3	107.7	106.8	111.3	113.1	104.7	99.5	118.5	115.9	111.1	105.8
24.	Manufacture of Foot-wear, Other Wearing Apparel etc.	0.34	90.6	80.4	68.5	77.2	79.7	67.2	80.1	83.3	81.2	93.1	78.9	75.6
25.	Manufacture of Wood and Cork except Furniture	0.49	114.2	131.4	127.2	123.6	122.7	122.7	122.7	122.7	122.7	122.7	122.7	122.7
27.	Manufacture of Paper and Paper Products	2.24	110.7	112.8	120.3	114.3	125.1	124.3	123.3	119.0	127.1	114.7	119.2	116.8
29.	Manufacture of Leather and Fur Products except Footwear etc.	0.32	110.7	104.2	61.2	64.5	79.7	80.8	67.5	68.2	61.9	86.7	86.7	70.5
30.	Manufacture of Rubber Products	2.22	122.7	127.9	136.2	132.8	153.8	150.2	150.0	144.6	144.7	146.0	133.7	129.6
31.	Manufacture of Chemicals and Chemical Products	10.90	155.5	171.6	178.7	175.4	185.6	190.7	192.9	188.7	198.4	181.6	177.8	175.7
32.	Manufacture of Products of Petroleum and Coal	1.62	124.8	132.7	150.6	129.9	134.7	148.6	156.0	134.6	161.8	144.9	161.8	123.9
33.	Manufacture of Non-metallic Mineral Products except Products of Petroleum and Coal	3.33	139.1	147.4	154.3	151.0	146.0	158.3	165.4	151.0	158.3	152.5	156.4	153.8
34.	Basic Metal Industries	8.84	137.9	144.8	150.2	143.4	144.7	141.1	146.7	138.7	156.0	137.2	138.4	154.3
35.	Manufacture of Metal Products except Machinery and Transport Equipment	2.77	133.7	137.0	154.3	149.0	152.6	163.8	167.2	166.2	165.0	156.0	159.5	145.9
36.	Manufacture of Machinery except Electrical Machinery	5.55	164.8	179.8	201.1	184.1	205.2	218.5	217.2	224.5	227.2	175.4	184.1	192.9
37.	Manufacture of Electrical Machinery, Apparatus, Appliances and Supplies	5.30	126.5	145.5	145.9	144.2	161.3	153.2	180.7	181.2	205.0	141.1	155.7	152.6
38.	Manufacture of Transport Equipment	7.39	122.3	124.5	127.6	118.9	122.0	129.7	131.3	135.2	155.6	110.0	123.1	122.5
39.	Miscellaneous Manufacturing Industries	1.70	72.9	99.9	149.8	169.3	105.8	108.8	122.2	113.5	107.3	125.0	114.1	202.1
5.	**Electricity**	**9.23**	**160.0**	**165.4**	**177.9**	**182.3**	**182.2**	**192.0**	**201.0**	**179.1**	**204.7**	**196.3**	**198.4**	**180.4**

(P) Provisional. (R) Revised.

Note : Figures now published supercede earlier figures.

Source: Central Statistical Organisation.

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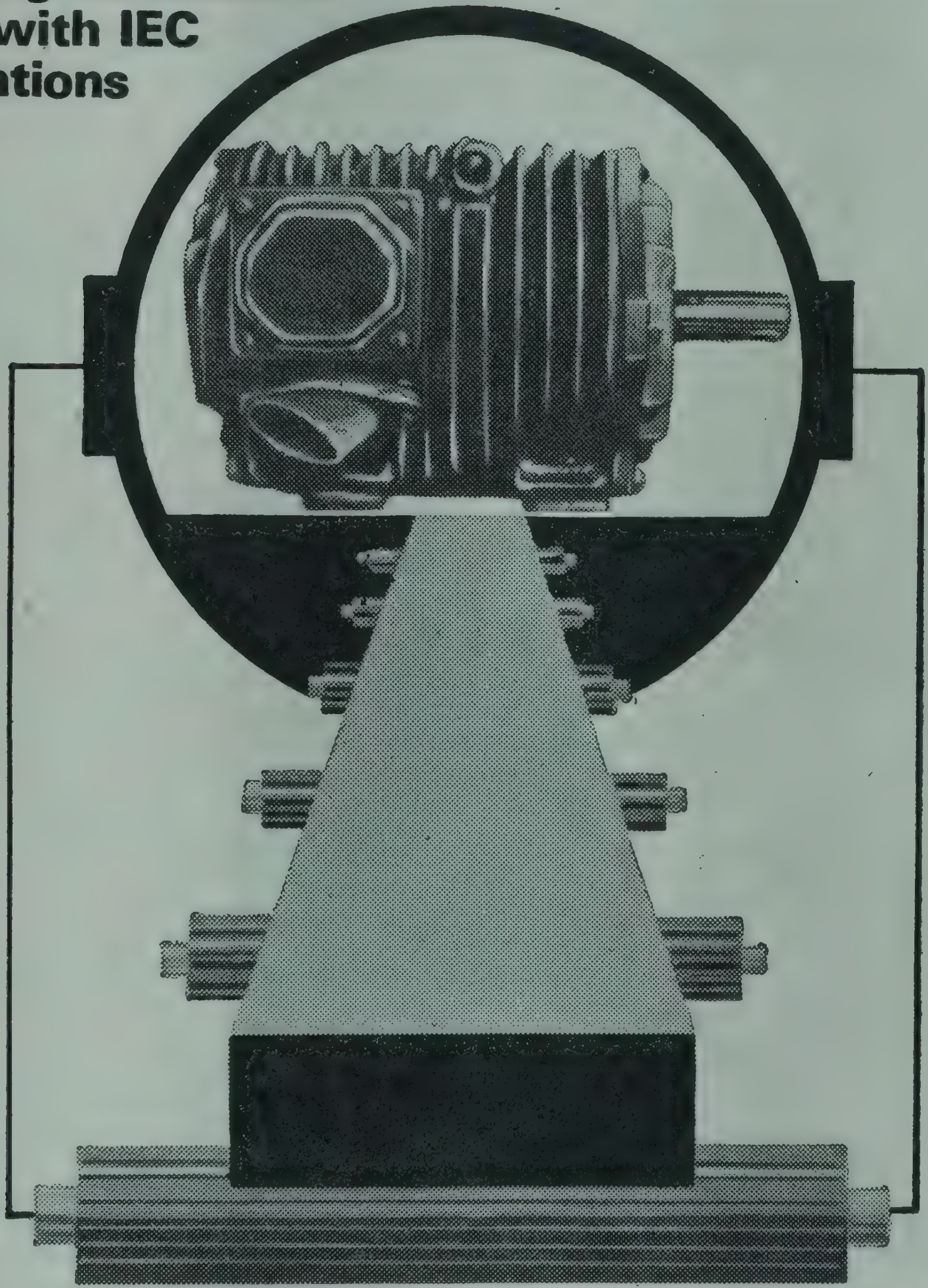

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Through the eyes of a child

If there weren't any medicines
The doctors would be helpless
So would all the nurses
and all the big hospitals.
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Or diarrhoea in his toe
Pray what would I give him
To make the pain go?

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